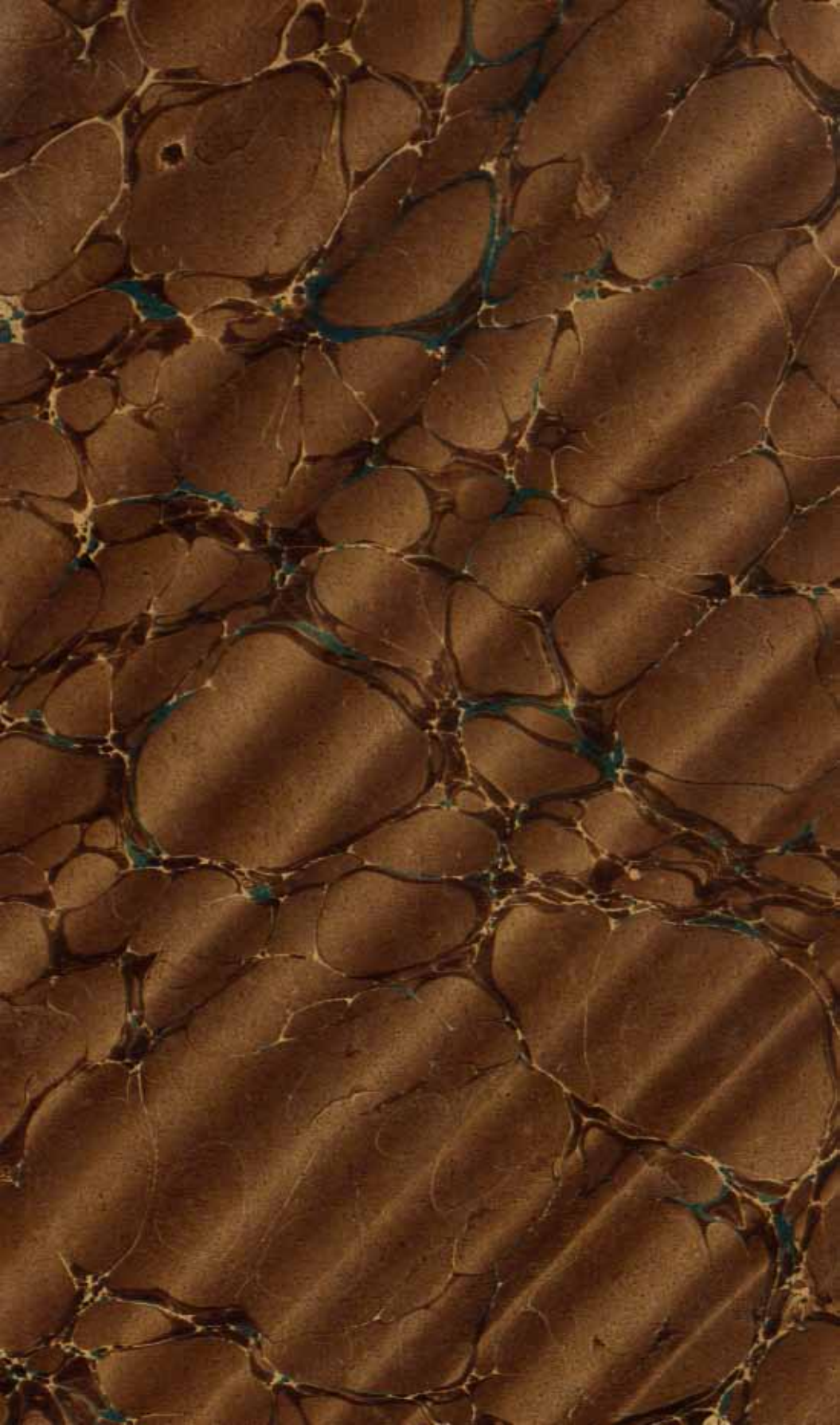


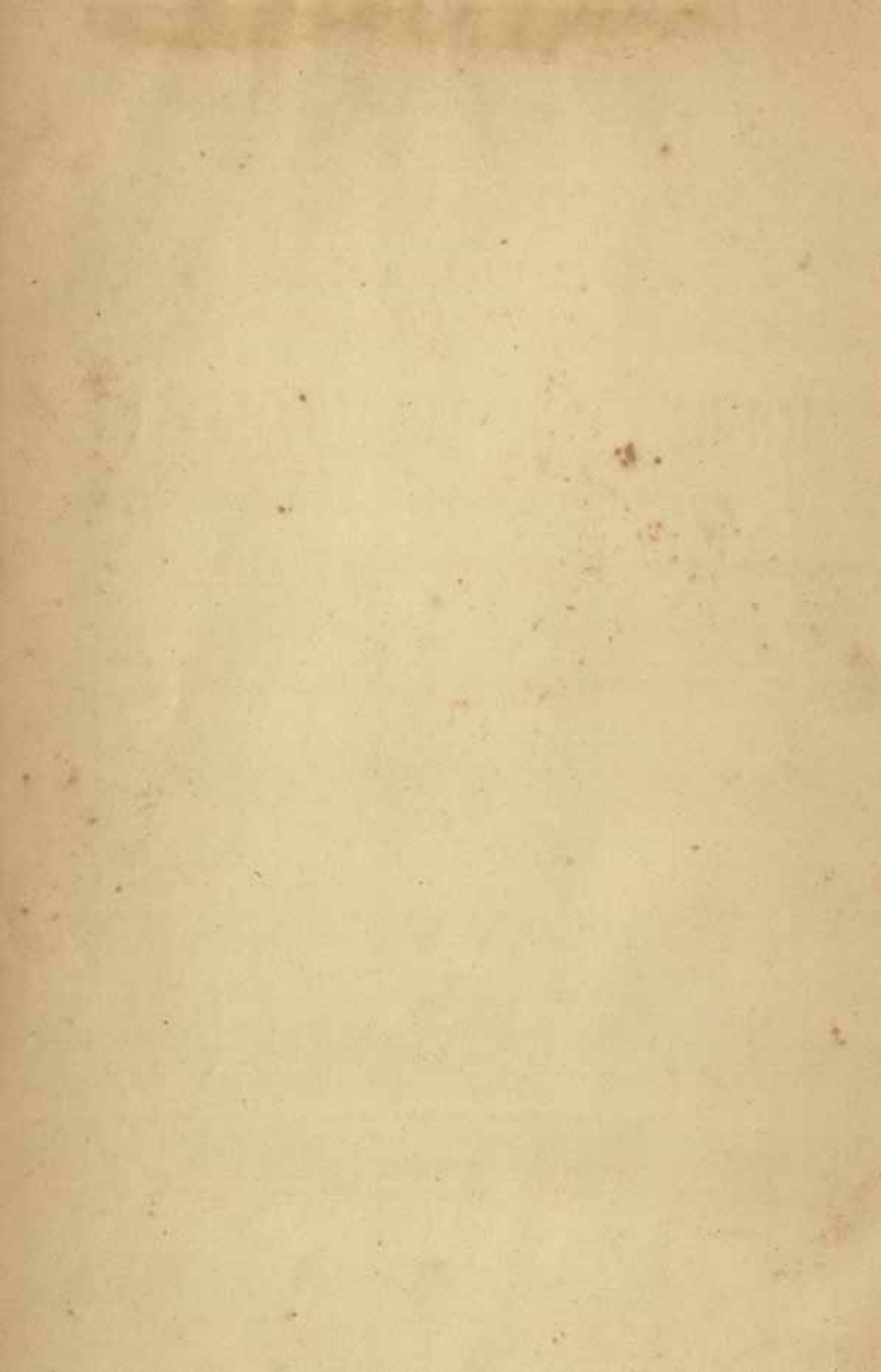
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CONTENTS OF VOLUME IV, 1888.

No. 1. JANUARY—MARCH.

	PAGE.
I.—AN INEDITED PORTRAIT OF PLATO (plate i; figure 1) by SALOMON REINACH,	1
II.—ANTIQUITIES OF SOUTHERN PHRYGIA AND THE BORDER-LANDS. II (plates II, III — maps), by W. M. RAMSAY,	6
III.—ARCHAIC IONIC CAPITALS FOUND ON THE AKROPOLIS (figures 2-6), by S. B. P. TROWBRIDGE,	22
IV.—AN ENGRAVED BRONZE BULL AT METAPONTO (figure 7), by ALFRED EMERSON,	28
V.—NOTES ON ORIENTAL ANTIQUITIES. VII. TWO STONE TABLETS WITH HIEROGLYPHIC BABYLONIAN WRITING (plates IV, V), by WILLIAM HAYES WARD,	39
NOTES.	
I.—EARLY ATHENIAN-IONIC CAPITALS FOUND ON THE AKROPOLIS (figure 8), by ALLAN MARQUAND,	42
II.—THE EXCAVATIONS IN IKARIA BY THE AMERICAN SCHOOL OF CLASSICAL STUDIES AT ATHENS, by A. L. F. JR.,	44
CORRESPONDENCE.	
Letter from Greece, by AUGUSTUS C. MERRIAM,	47
REVIEWS AND NOTICES OF BOOKS.	
G. MASPÉRO, <i>L'Archéologie Égyptienne</i> : by ALLAN MARQUAND,	58
STANLEY LANE-POOLE, <i>The Art of the Saracens in Egypt</i> : by A. L. FROTHINGHAM, JR.,	61
EDOUARD NAVILLE, <i>Goshen and the Shrine of Sâft el Hennek</i> : IDEM,	65
HEINRICH BRUNN, <i>Monuments of Greek and Roman Sculpture</i> : IDEM,	67
ARCHÆOLOGICAL NEWS.	
AFRICA (Egypt, Morocco); ASIA (Hindustan, Mesopotamia, Palestine, Phœnicia, Asia Minor, Kypros); EUROPE (Greece, Krete, Italy, Spain, France, Switzerland, Holland, Germany, Austria-Hungary, Denmark, Sweden, Russia, England); AMERICA (United States), by A. L. FROTHINGHAM, JR.,	69

No. 2. APRIL—JUNE.

I.—NOTES ON CHRISTIAN MOSAICS. III. THE LOST MOSAICS OF THE EAST, by A. L. FROTHINGHAM, JR.,	127
II.—INSCRIPTIONS FOUND UPON THE AKROPOLIS, by CARL D. BUCK,	149
III.—A LAUGHING GIRL AND A STUDY OF COIFFURE: A TERRACOTTA HEAD IN MUNICH (plate VI), by ALFRED EMERSON,	165
IV.—AN ARCHAIC PATERA FROM KOURION (plate VII), by ALLAN MARQUAND,	169
V.—UNPUBLISHED OR IMPERFECTLY PUBLISHED HITTITE MONUMENTS. III. RELIEFS AT CARCHEMISH=JERABLŪS (plates VIII, IX), by WILLIAM HAYES WARD,	172
NOTE.	
VETULONIA AND EARLY ITALIC ARCHEOLOGY (plates X, XI), by A. L. F., JR.,	175

REVIEWS AND NOTICES OF BOOKS.

PAGE.

- PERROT ET CHIZEZ, *Histoire de l'Art dans l'antiquité: tome IV, Judée—Sardaigne—Syrie—Cappadoce*: . . . by A. L. FROTHINGHAM, Jr., 181
 GUSTAV HIRSCHFELD, *Paphlagonische Felsengrüber*: by ALLAN MARQUAND, 187
Die Felsenreliefs in Kleinasien und das Volk der Hittiter, . . . IDEM, 189

ARCHÆOLOGICAL NEWS.

- AFRICA (Egypt); ASIA (Hindustan, Turkestan, Armenia, Asia Minor, Kypros); EUROPE (Greece, Krete, Italy, France, Switzerland, Germany, Turkey, Russia, England), . . . by A. L. FROTHINGHAM, Jr., 191

SUMMARIES OF PERIODICALS.

- Bulletin de Correspondance Hellénique—Bullettino d. imp. Istituto arch. germ. Sez. Romana—Ἐφημερίς Ἀρχαιολογική—Gazette Archéologique—Jahrbuch d. k. deuts. archäol. Instituts—Mittheilungen d. k. deuts. archäol. Instituts. Athen. Abth.—Revue Archéologique—Revue des Études Grecques*, . . . 220

No. 3. JULY—SEPTEMBER.

I.—THE RELATION OF THE JOURNAL TO AMERICAN ARCHÆOLOGY,

by THE EDITORS, 259

II.—ANTIQUITIES OF SOUTHERN PHRYGIA AND THE BORDER-LANDS. III,

by W. M. RAMSAY, 263

III.—THE ANCIENT COINAGE OF CHINA (plates XII, XIII), by W. S. AMENT, 284

IV.—GARGARA, LAMPONIA, AND PIONIA: TOWNS OF THE TROAD (figures 9, 10, 11), . . . by JOSEPH THACHER CLARKE, 291

NOTES.

I.—NOTE ON W. M. RAMSAY'S "ANTIQUITIES OF SOUTHERN PHRYGIA,"

by W. M. RAMSAY, 320

II.—THE PUBLICATIONS OF THE GERMAN ARCHÆOLOGICAL INSTITUTE,

by CHARLES ELIOT NORTON, 320

III.—THE AMERICAN SCHOOL OF CLASSICAL STUDIES AT ATHENS, . . . 321

IV.—PROFESSOR PUTNAM'S WORK IN THE OHIO VALLEY, . . . 323

V.—AN AMERICAN STUDENT FOR THE EGYPT EXPLORATION FUND, . . . 325

DOCUMENTS (inedited).

I.—INVENTORY OF GIFTS OF POPE NICHOLAS III († 1280) TO THE BASILICA OF SAN PIETRO IN VATICANO, . . . 326

II.—INVENTORY OF GIFTS OF CARDINAL FRANCESCO DE' TERALDESCHI IN 1578 TO THE BASILICA OF SAN PIETRO IN VATICANO, . . . 328

III.—PROCES-VERBAL BY GIACOMO GRIMALDI OF THE OPENING OF THE TOMB OF POPE BONIFACE VIII IN THE BASILICA OF SAN PIETRO IN VATICANO IN 1695, . . . by A. L. FROTHINGHAM, Jr., 330

ARCHÆOLOGICAL NEWS.

- AFRICA (Egypt, Algeria, Tunisia, Malta); ASIA (Turkestan, Mesopotamia, Arabia, Palestine, Phœnicia, Syria, Armenia, Asia Minor, Kypros); EUROPE (Greece, Krete, Italy, Spain, France, Switzerland, Belgium, Germany, Austria-Hungary, Turkey, Russia, England); AMERICA (United States, Peru), . . . by A. L. FROTHINGHAM, Jr., 333

SUMMARIES OF PERIODICALS.

- Bullettino d. imp. Istituto arch. germ. Sez. Romana—Ἐφημερίς Ἀρχαιολογική—Jahrbuch d. k. deuts. archäol. Instituts—Journal of Hellenic Studies—Mittheilungen d. k. deuts. archäol. Instituts. Athen. Abth.—Revue des Études Grecques*, 385

No. 4. OCTOBER—DECEMBER.

	PAGE.
I.— <i>INEDITED TERRACOTTAS FROM MYRINA, IN THE MUSEUM AT CONSTANTINOPLE</i> (plates xiv, xv; figure 12), . . . by SALOMON REINACH,	413
II.— <i>AMERICAN SCHOOL OF CLASSICAL STUDIES AT ATHENS. DISCOVERIES IN THE ATTIC DEME OF IKARIA. 1. INSCRIPTIONS FROM IKARIA,</i> by CARL D. BUCK,	421
III.— <i>AMERICAN SCHOOL OF CLASSICAL STUDIES AT ATHENS. A NEW SIKYONIAN INSCRIPTION,</i> . . . by MORTIMER LAMSON EARLE,	427
IV.— <i>EARLY BRONZES RECENTLY DISCOVERED ON MOUNT IDA IN KRETE</i> (plates xvi, xvii, xviii, xix, xx; figures 13, 14, 15, 16), by A. L. FROTHINGHAM, JR.,	431
V.— <i>REMAINS OF AN ANCIENT GREEK BUILDING DISCOVERED IN MALTA</i> (figures 17, 18), . . . by A. A. CARUANA,	450
NOTES.	
I.— <i>EXCAVATION OF A CHRISTIAN PALACE IN ROME,</i> . . .	455
II.— <i>THE EXISTENCE OF AMERICA KNOWN EARLY IN THE CHRISTIAN ERA,</i> by A. L. F., JR.,	456
REVIEWS AND NOTICES OF BOOKS.	
ARCHÆOLOGY.	
LUDWIG VON SYBEL, <i>Weltgeschichte der Kunst:</i> . . . by A. L. F., JR.,	457
ORIENTAL ARCHÆOLOGY.	
M. HEUZEY, <i>Un Palais Chaldéen:</i> IDEM,	458
CLASSICAL ARCHÆOLOGY.	
A. BAUMEISTER, <i>Denkmäler des klassischen Altertums:</i> by ALFRED EMERSON,	459
OLIVIER RAYET, <i>Études d'Archéologie et d'Art:</i> . . . by A. L. F., JR.,	464
OLIVIER RAYET et MAXIME COLLIGNON, <i>Histoire de la Céramique Grecque:</i> IDEM,	465
CHRISTIAN ARCHÆOLOGY.	
CHARLES W. BENNETT, <i>Christian Archaeology:</i> IDEM,	466
EDOUARD CORROYER, <i>L'Architecture Romane:</i> IDEM,	467
THE RENAISSANCE.	
EUGÈNE MÜNTZ, <i>Les Collections des Médicis au XV^e siècle:</i> . . . IDEM,	468
ÉMILE MOLINIER, <i>La Céramique italienne au XV^e siècle:</i> . . . IDEM,	470
PREHISTORIC ARCHÆOLOGY.	
J. DE BAYE, <i>Archéologie préhistorique:</i> IDEM,	471
ARCHÆOLOGICAL NEWS.	
AFRICA (Egypt, Tunisia); ASIA (Hindustan, Palestine, Phœnicia, Syria, Asia Minor, Kypros); EUROPE (Greece, Italy, Sicily, Spain, France, Germany, Austria-Hungary, Denmark, Russia, Turkey, England, Wales); AMERICA (United States, Central America, United States of Colombia), by A. L. FROTHINGHAM, JR.	472
SUMMARIES OF PERIODICALS.	
Ἐφημερίς Ἀρχαιολογική— <i>Gazette Archéologique</i> — <i>Jahrbuch d. k. deut. archäol. Instituts</i> — <i>Mittheilungen d. k. deut. archäol. Instituts</i> . Athenische Abth.— <i>Revue Archéologique</i> — <i>Revue des Études Grecques</i> — <i>Rivista Italiana di Numismatica</i> ,	531

ALPHABETICAL TABLE.

	PAGE.
AMENT (W. S.). The Ancient Coinage of China,	284
AMERICAN SCHOOL OF CLASSICAL STUDIES AT ATHENS.	
Note on the School,	321
Discoveries in the Attic deme of Ikaria,	421
A new Sikyonian inscription,	427
ARCHÆOLOGICAL NEWS,	69, 191, 333, 472
Algeria, 339—Arabia, 343—Armenia, 196, 346—Asia Minor, 86, 196, 346, 485—Austria-Hungary, 120, 380, 520—Belgium, 378—Central America, 529—Colombia, 530—Denmark, 121, 522—Egypt, 70, 191, 333, 472—Eng- land, 122, 217, 381, 523—France, 116, 215, 374, 515—Germany, 119, 216, 379, 518—Greece, 90, 200, 349, 491—Hindustan, 77, 195, 475—Holland, 119—Italy, 102, 207, 362, 502—Krete, 99, 207, 362, 502—Kypros, 87, 198, 348, 486—Malta, 341—Mesopotamia, 84, 342—Morocco, 77—Palestine, 85, 344, 482—Peru, 384—Phoenicia, 86, 346, 483—Russia, 121, 217, 380, 522 —Sicily, 373, 511—Spain, 116, 374, 514—Sweden, 121—Switzerland, 119, 216, 378—Syria, 346, 483—Tunisia, 340, 473—Turkestan, 195, 342—Tur- key, 217, 380, 523—United States, 123, 382, 528—Wales, 527.	
BUCK (Carl D.). Inscriptions found upon the Akropolis,	149
Discoveries in the Attic deme of Ikaria. I. Inscriptions,	421
CARUANA (A. A.). Remains of an ancient Greek building discovered in Malta,	450
CLARKE (Joseph Thacher). Gargara, Lamponia, and Pionia: towns in the Troad,	291
EARLE (Mortimer L.). A new inscription from Sikyon,	427
EDITORS (The). The relation of the Journal to American Archaeology,	259
EMERSON (Alfred). An engraved bronze bull at Metaponto,	28
A laughing girl and a study of coiffure: a terracotta head in Munich,	165
Review of <i>Denkmäler des klassischen Altertums</i> ,	459
FOWLER (Harold N.). Summaries of Periodicals,	232, 240, 249, 389, 391, 408, 531, 537, 539
FROTHINGHAM (Arthur L. Jr.). Notes on Christian Mosaics. III. The Lost Mosaics of the East,	127
Vetulonia and early-Italic Archaeology,	175
Inedited Documents:	
I. Inventory of Gifts of Pope Nicholas III to the Vatican Basilica,	326
II. Inventory of Gifts of Card. Francesco de' Tebaldeschi in 1378 to the Vatican Basilica,	328
III. Procès-verbal by Giacomo Grimaldi of the opening of the tomb of Pope Boniface VIII, in 1605, in the Vatican Basilica,	330
Early Bronzes discovered on Mount Ida in Krete,	431
The Existence of America known early in the Christian era,	456
Review of <i>The Art of the Saracens in Egypt</i> , by STANLEY LANE-POOLE,	61
Review of <i>Histoire de l'Art dans l'antiquité: tome iv, Judée—Sardaigne— Syrie—Cappadoce</i> , by PERROT et CHIZEZ,	181

	PAGE.
———. Notice of <i>Goshen and the Shrine of Saft el Henneh</i> , by EDOUARD NAVILLE,	65
———. Notice of <i>Monuments of Greek and Roman Sculpture</i> , by HEINRICH BRUNN,	67
———. Notice of <i>Weltgeschichte der Kunst</i> , by LUDWIG VON SYBEL,	457
———. Notice of <i>Un Palais Chaldéen</i> , by M. HEUZEY,	458
———. Notice of <i>Études d'Archéologie et d'Art</i> , by OLIVIER RAYET,	464
———. Notice of <i>Histoire de la Céramique Grecque</i> , by OLIVIER RAYET et MAXIME COLLIGNON,	465
———. Notice of <i>Christian Archaeology</i> , by CHARLES W. BENNETT,	466
———. Notice of <i>L'Architecture Romane</i> , by EDOUARD CORROYER,	467
———. Notice of <i>Les Collections des Medicis au XI^e siècle</i> , by EUGÈNE MÜNTZ,	468
———. Notice of <i>La Céramique italienne au XI^e siècle</i> , by ÉMILE MOLINIER,	470
———. Notice of <i>Archéologie préhistorique</i> , by J. DE BAYE,	471
———. <i>Archæological News</i> ,	69, 191, 333, 472
———. <i>Summaries of Periodicals</i> ,	227, 234, 257, 385, 410, 533, 544, 548, 549
MARQUAND (Allan). Early Athenian-Ionic capitals found on the Akropolis,	42
———. An archaic Patera from Kourion,	169
———. Review of <i>L'Archéologie égyptienne</i> , by G. MASFÉRO,	58
———. Review of <i>Paphlagonische Felsengräber</i> , and of <i>Die Felsenreliefs in Klein-</i> <i>asien und das Volk der Hittiter</i> , by GUSTAV HIRSCHFELD,	187, 189
———. <i>Summaries of Periodicals</i> ,	251, 542
MERRIAM (Augustus C.). Letter from Greece,	47
NORTON (C. E.). The Publications of the German Archæological Institute,	320
RAMSAY (W. M.). Antiquities of Southern Phrygia and the Border-Lands,	6, 263
REINACH (Salomon). An inedited portrait of Plato,	1
———. Inedited Terracottas from Myrina, in the Museum at Constantinople,	413
SUMMARIES OF PERIODICALS,	220, 385, 531
<i>Bulletin de Correspondance Hellénique</i> ,	220
<i>Bullettino d. imp. Istituto arch. germ. Sezione Romana</i> ,	227, 385
<i>Ἐφημερίς Ἀρχαιολογική</i> ,	232, 389, 531
<i>Gazette Archéologique</i> ,	234, 533
<i>Jahrbuch d. k. deuts. archäol. Instituts</i> ,	240, 391, 537
<i>Journal of Hellenic Studies</i> ,	392
<i>Mittheilungen d. k. deuts. archäol. Instituts. Athenische Abth.</i> ,	249, 404, 539
<i>Revue Archéologique</i> ,	251, 542
<i>Revue des Études Grecques</i> ,	257, 410, 548
<i>Rivista Italiana di Numismatica</i> ,	549
TROWBRIDGE (S. B. P.). Archaic Ionic Capitals found on the Akropolis,	22
WARD (William Hayes). Notes on Oriental Antiquities. VII. Two stone tablets with hieroglyphic Babylonian writing,	39
———. Unpublished or imperfectly published Hittite monuments. III. Reliefs at Carchemish = Jerablûs,	172
WHEELER (J. R.). Summary of Periodicals,	404
WRIGHT (John Henry). Summaries of Periodicals,	220, 392

PLATES.

	PAGES IN TEXT.
I.—Portrait-head of Plato, in the Museum of the Louvre,	1-5
II, III.—Maps of Phrygia and the Border-Lands, drawn by W. M. RAMSAY,	6-21
IV, V.—Two stone tablets with hieroglyphic Babylonian writing, in the collection of Dr. A. BLAU,	39-41
VI.—Terracotta Head, in the Royal Antiquarium at Munich,	165-8
VII.—Kypriote Patera from Kourion, in the Metropolitan Museum, New York,	169-71
VIII, IX.—Hittite Reliefs at Carchemish = Jerablûs,	172-4
X.—Objects from the "Tomb of the Warrior" at Vetulonia,	
X ^a .—Bronze Vessel from the "Tomb of the Warrior" at Vetulonia, }	175-80
XI.—Cinerary Coffin from the "Tomb of the Warrior" at Vetulonia, }	
XII, XIII.—The Ancient Coinage of China,	384-90
XIV, XV.—Terracotta Statuettes from Myrina,	413-20
XVI-XX.—Ancient bronzes found in the Cave of Zeus on Mount Ida in Krete,	431-49
XVI.—Shield of Merodach = Melkart,	437-40
XVII.—Shield of Horus,	440-2
XVIII.—Shield of Ashtaroth = Astarte,	442-4
XIX.—1. Shield of Goats,	444
2. Egypto-Phoenician Patera,	447
XX.—Patera with zones of animals,	448

FIGURES.

1.—Bust of Plato, in the Old Museum of Berlin,	2
2.—Painted Ionic Capital, lately found on the Akropolis,	22
3.—Painted Ionic Capital, found on the Akropolis,	23
4.—Painted Ionic Capital, from a vase in the Akropolis Museum,	24
5.—Painted Ionic Capital from a vase in the Polytechnic Museum at Athens,	25
6.—Carved and Painted Ionic Capital, found on the Akropolis,	26
7.—Engraved Bronze Bull, in the Museum at Metaponto,	28
8.—Inlaid-wood Ionic Capital, from the Bosphoros,	42
9.—Map showing the Political Division of the Southern Troad,	293
10.—Sketch-plan of the site of Gargara,	299
11.—Masonry of Walls of Gargara,	300
12.—Inedited Terracottas from Myrina,	420
13.—Figure from hematite Seal-cylinder, in the British Museum,	438
14.—Lapis-lazuli Seal-cylinder, in the British Museum,	439
15.—Carnelian Seal-cylinder, in the British Museum,	443
16.—Fragment of bronze shield with hunting-scenes, found in the Cave of Zeus on Mount Ida in Krete,	445
17.—Ground-plan of Greek farmhouse discovered in Malta,	451
18.—Crushing-Mill in Greek farmhouse discovered in Malta,	453
19.—Ground-plan of the Temple of Aphrodite at Old Paphos, in Krete,	489

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THE AMERICAN
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AND OF THE
HISTORY OF THE FINE ARTS.

THE JOURNAL is the official organ of the ARCHÆOLOGICAL INSTITUTE OF AMERICA, and will aim to further the interests for which the Institute was founded. It treats of all branches of Archæology and Art—Oriental, Classical, Early Christian, Mediæval, and American, and is intended to supply a record of the important work done in the field of Archæology, under the following categories: 1. Original Articles; 2. Correspondence from European Archæologists; 3. Archæological News, presenting a careful and ample record of discoveries and investigations in all parts of the world; 4. Reviews of Books; 5. Summaries of the contents of the principal Archæological Periodicals.

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REVIEW OF PAST WORK.

It has been the aim of the editors that the *JOURNAL*, besides giving a survey of the whole field of Archaeology, should be international in character, by affording to the leading archaeologists of all countries a common medium for the publication of the results of their labors. This object has been in great part attained, as is shown by the list of eminent foreign and American contributors to the three volumes already issued, and by the character of articles and correspondence published. Not only have important contributions to the advance of the science been made in the original articles, but the present condition of research has been brought before our readers in the departments of Correspondence, annual Reviews of various branches (like Numismatics, Biblical Archaeology, Greek Epigraphy), and reviews of the more important recent books.

Two departments in which the *JOURNAL* stands quite alone are (1) the *Record of Discoveries*, and (2) the *Summaries of Periodicals*. In the former, a detailed account has been given of all discoveries and excavations in every portion of the civilized world, from India to America, especial attention being paid to Greece and Italy. In order to ensure thoroughness in this work, more than sixty periodical publications have been consulted, and material secured from special correspondents.

In order that readers should know of everything important that appears in periodical literature, a considerable space has been given to careful summaries of the papers contained in the principal periodicals that treat of Archaeology and the Fine Arts. By these various methods, all important work done is concentrated and made accessible in a convenient but scholarly form, equally suited to the specialist and to the general reader.

PROGRAM OF VOLUME IV, 1888.

As the resources of the JOURNAL increase, greater efficiency will be given to various departments. A leading feature of the last volume was the large number of valuable plate-illustrations (33), a number more than double that of preceding years. This full illustration of articles will be continued.

The coming year, 1888, will be distinguished by important papers connected with American research and collections. As a result of the expedition to southern Italy, undertaken, under the auspices of the Archæological Institute, by Messrs. Clarke and Emerson—which was also extended to Greece and the coast of Africa—there will be published in the JOURNAL a series of papers, among which are the following: 1. On the architecture of the temple of Hera Lakinia at Kroton; 2. On the pediment-sculptures of the same temple; 3. On the metope-sculptures of the temple of Apollon Lykeios; 4. On two archaic bronzes at Catanzaro; 5. On some statuary at Tripoli. In view also of recent acquisitions, especially by the Baltimore branch of the Archæological Institute, there will be articles, by Dr. Hartwig and others, on a collection of black- and red-figured vases signed by well-known Greek artists, such as Nikosthenes, Xenokles, Epiktetos, Duris, Philtias. Professor Emerson will write on a collection of Tarentine terracottas. Professor Marquand will publish another patera in the Metropolitan Museum of New York. Professor Merriam, Director of the School at Athens, will write on Excavations in Greece; and Mr. C. D. Buck, a member of the School, will publish a paper on Inscriptions recently found on the Akropolis.

The various series commenced in past volumes will be continued: such as those by Dr. Ward on Oriental Antiquities, by MM. Müntz and Frothingham on Christian Mosaics. Professor Ramsay (of Glasgow) will continue his series by publishing the most important of his investigations of the Antiquities of Asia Minor. Count Cozza (Inspector of Antiquities for Etruria) will throw new light on the history of the ceramics of Etruria. Professor Frothingham will publish a paper on The Lost Mosaics of the East; and will treat of early Gothic Architecture in Italy, as illustrated by some monuments in the Papal States. Dr. Ward will publish some Hittite Sculptures.

The present policy of making the JOURNAL a complete record of contemporary archæological work, by its correspondence, book-reviews, news, and summaries, will be continued.

CHARLES ELIOT NORTON.
ARTHUR L. FROTHINGHAM.
ARTHUR L. FROTHINGHAM, JR.

NOTICES.

London Athenæum.—We have no hesitation in saying that no other periodical in the English language is so well fitted to keep the student who lacks time or opportunity to read all the foreign journals abreast of the latest discoveries in every branch of archæology.

Göttingische Gelehrte Anzeigen.—No comprehensive account of the most recent discoveries exists, and the new American Journal can do most meritorious work and fill a deficiency which, since the time of Gerhard's death, has been often deplored by every archæologist who had not the good fortune to be at the fountain-heads.

Philologische Rundschau.—We may expect that the American Journal of Archæology will take an honorable position by the side of those already existing in Europe.

Bibliothèque de l'École des Chartes.—As we think it (the American Journal of Archæology) is called upon to render real service, not only in the United States, but in Europe and in France, we take pleasure in announcing it here. The plan is vast and well conceived.

Archivio di Letteratura Biblica ed Orientale (Turin).—Periodicals are divisible into three categories: some have no pretensions to be classed as learned; some pretend to be but are not so in reality; others, finally, pretend to be and really are. The periodical which we announce (*The American Journal of Archæology*) belongs to the last category.

New York Evening Post.—The American Journal of Archæology will not disappoint the hopes of the friends of the science in America. If not well supported, it will be because there is little real interest in America in classical and mediæval archæology.

Chicago Evening Journal.—*The American Journal of Archæology* is alike creditable to the country and to the earnest and scholarly gentlemen who have it in charge, and we are pleased to know that it has already achieved an enviable reputation in Europe.

London Academy.—Mr. J. S. Cotton, at the annual meeting of the Egypt Exploration Fund (London, Dec. 22, 1887), referred to the *American Journal of Archæology* and the *American Journal of Philology*, which he defined as being of a higher order of merit than any publications bearing similar titles in Great Britain.

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AMERICAN JOURNAL OF ARCHÆOLOGY.

VOL. IV.

No. 1.

AN INEDITED PORTRAIT OF PLATO.

[PLATE I.]

During the summer months of 1881, which I spent in Smyrna, I had the opportunity of purchasing a certain number of antiquities for the Louvre Museum, and of examining a great many more, which I now regret to have allowed to escape. Among the former is the fine marble head published here for the first time on PLATE I. I was informed of its existence by a Greek broker, who told me it was walled in a Turkish house somewhere about the top of mount Pagos. On my expressing the wish to go with him to see it, he answered that it was impossible, for some reason, and that he would rather bring the head to my hotel. I believe the whole story about the Turkish house was false, for the broker, who probably was himself in possession of the head, began by getting from me the price which the pretended Turk demanded, and then a commission of twenty per cent. for his trouble. Be that as it may, I did not regret the small sum paid for it, the head having proved to be still more interesting than I supposed at the time I first saw it.

I safely conveyed my acquisitions to the Louvre, in the autumn of 1881, and a long time elapsed before I thought again about the bearded philosopher's head, which remained, rather forgotten, in the storeroom of our Museum. Five years later, in the autumn of 1886, while going through the Old Museum in Berlin, I was struck by a head, quite similar in appearance, with a small pedestal bearing the inscription ΠΛΑΤΩΝ. Having asked one of the keepers for some information about it, I learned that Professor Helbig was on the point of publishing

this bust of Plato in the *Jahrbuch d. deutschen archäol. Instituts*. I was naturally bound to await his publication: in the meantime, I caused the head in the Louvre to be mounted on a bust in plaster and photographed. I must now give, together with a few supplements, a short analysis of Professor Helbig's learned paper in the *Jahrbuch*,¹ which I would have entirely translated, as the best illustration of the Louvre bust, if the *Jahrbuch* were not so widely known among friends of archæology and art.



FIG. 1.—Bust of Plato, in the old Museum of Berlin.

The Berlin bust, which is reproduced in *fig. 1* for the sake of comparison, first appeared at the sale of Alessandro Castellani's collection in Rome, in the latter days of March 1884.² The catalogue describes it, as follows, under No. 1086: *Hermès de Platon, avec l'inscription ΠΛΑΤΩΝ sur la gaine. Marbre grec. Nez fruste*. It was purchased by Count Michael Tysszkiewicz, who shortly afterwards presented it to the Berlin Museum.³ The workmanship is rather dry, but points to a good original. As the inscription—which, to judge from the shape of the characters, is not anterior to the epoch of the Antonines—is undoubtedly genuine, and belongs to the same period as the sculpture itself, the Berlin bust deserves a high rank among the typical materials of Greek

iconography, being the first authentic portrait of the great philosopher.⁴

Previous to that discovery, Visconti had⁵ published a small bust in

¹ HELBIG, *Ueber die Bildnisse des Platon*, in *Jahrbuch des deutschen archäol. Instituts*, 1886, Bd. I, S. 71-78, Taf. 6, 7.

² *Catalogue d'objets d'art dépendant de la Collection Alessandro Castellani*: Paris, 1884, 40.

³ *Verzeichniss der antiken Sculpturen des Berliner Museums*: Berlin, 1885, p. 61, No. 301.

⁴ A bust of Plato, with his name inscribed, was discovered in 1846 at Tivoli (*Corpus Inscriptionum Græcarum*, No. 6103), but Professor Helbig has been unable to find it at the Vatican and it has never been published.

the Museum of Florence bearing the name of ΠΛΑΤΩΝ.⁵ But the inscription is probably a forgery, the style of the sculpture belonging to the imperial period, when the letter Π with unequal branches was no longer used.⁶ On the other hand, there exists in the Vatican Museum a bust very like the Castellani Plato, the pedestal of which bears the inscription ΖΗΝΩΝ.⁷ M. Helbig, who has published a photograph of that bust under two aspects,⁸ believes the inscription to be modern, arguing from the suspicious appearance of the characters, which are scratched on the surface of the marble rather than engraved. The Vatican bust is, in fact, very puzzling. Judging from the photograph, the inscription bears no conclusive evidence of falsity, and we may perhaps admit that the confusion between Plato and Zeno originated in some Græco-Roman workshop, where several busts of philosophers were being sculptured at the same time. The resemblance of the Vatican bust to those in Berlin and Paris is evident, and certain details even lead to the supposition that they are derived from the same original; but the head of the Vatican Plato is more slender, more delicate in appearance, than any of the other replicas. M. Helbig is inclined to think that the Roman bust, in which the pupils of the eyes are not marked with the chisel, is the best copy and the nearest to the original. It is the best, perhaps, from an æsthetic point of view, but the evidence of the bust from Smyrna seems to show that the true features of Plato, with their natural roughness and severity, are to be looked for in the Smyrna sculpture rather than in the somewhat idealized and edulcorated copy preserved in the Pio Clementino Museum.

Beside the copy in question, M. Helbig has enumerated five others: (1) a head in the Capitol, No. 58, which has not yet been correctly

⁵ VISCONTI, *Iconografia graeca*, I, pl. XVIII a, 3, 4, p. 219-21 (I, p. 172 of the 4o edition in French); SCHUSTER, *Ueber die erhaltenen Porträts griechischer Philosophen*, t. II, I, p. 12-13. I learn from DÜTSCHKE (*Antike Bildwerke in Oberitalien*, t. III, p. 190, No. 393) that the genuineness of the inscription was first suspected by E. BRAUN (*Annali dell' Inst.*, XI, p. 207). Visconti believed that this head was the one which had been found in Athens in the XV century and sold to Lorenzo de' Medici by Girolamo da Pistoia; but this cannot be true, as Dütschke observes, and the bust purchased by Lorenzo, later in Gori's collection and in Pisa, must have been mislaid or have perished in some fire, as it has never reappeared since.

⁶ Cf. DITTENBERGER, in the *Archäol. Zeitung*, 1876, p. 139, and my *Traité d'épigraphie grecque*, p. 205.

⁷ VISCONTI, *Museo Pio Clementino*, t. VI, pl. 33.

⁸ *Jahrbuch*, 1886, pl. VI, 2 and p. 72; also in BAUMEISTER, *Denkmäler des klassischen Alterthums*, p. 1335, fig. 1492.

published;⁹ (2) an inedited head in the Villa Borghese; (3) a head in the Casino di Pirro Ligorio, badly preserved, published along with M. Helbig's article; (4) a head in the Torlonia collection;¹⁰ (5) another inedited head in the Vatican, No. 140. It is not necessary, for our purpose, to mention a few other cognate sculptures, described by M. Helbig, which, however, bear no close resemblance to the series we are dealing with. Upon the whole, we find eight replicas of the same type, the Berlin and the Paris busts included: a number certainly to be increased by fresh research in collections, but sufficing to prove that there existed some celebrated portrait of Plato, sculptured in his time, which remained, perhaps exclusively, the model from which all the later copies were derived. M. Helbig has justly remarked that the disposition of the hair and beard in the replicas can be paralleled by specimens of Attic sepulchral *stelai* belonging to the IV century B. C. We know from Olympiodoros (*Life of Plato*), that images of Plato were set up in many places, *πανταχοῦ ἀνακείμεναι*, and Visconti¹¹ had already expressed the belief, which seems to be shared by M. Helbig, that the original of those portraits was the bronze statue made by Silanion,¹² which was perhaps afterwards transferred to Constantinople, where Christodoros describes a bronze statue of Plato¹³ in the public gymnasium of Zeuxippos.

The chief texts relating to Plato's physical appearance have been carefully collected by M. Helbig: I will only add one of Olympiodoros, which has already been quoted by Visconti. The name or rather the surname Πλάτων, involving the idea of breadth, had been differently explained in ancient times: Neanthes thought it alluded to the breadth of his forehead, while others explained it by his broad chest, or even by his broad eloquence.¹⁴ Olympiodoros, adopting the first two explanations, writes: *Ἐκλήθη δ' οὕτως διὰ τὸ δύο μόρια τοῦ σώματος ἔχειν πλατύτητα, τὸ τε στέρνον καὶ τὸ μέτωπον, ὥς δηλοῦσι πανταχοῦ αἱ ἀνακείμεναι αὐτοῦ εἰκόνες οὕτω φαινόμεναι*. This passage is important in so far as it is inspired by the knowledge of many authentic portraits of Plato that Olympiodoros had the opportunity of examining. Now, the breadth of the forehead, a characteristic of profound thought and sublime intelligence, is a remarkable feature of

⁹ BOTTARI, *Museum Capitolinum*, I, pl. 67.

¹⁰ *I monumenti del Museo Torlonia riprodotti con la fototipia*, Roma, 1884, pl. XL.

¹¹ *Iconographie grecque*, I, p. 173.

¹² *Diog. LAERT.*, III. 25.

¹³ *CHRISTOD.*, *Ἐκφρασ.*, V. 97.

¹⁴ *Diog. LAERT.*, III. 4.

the Smyrna head, where it is perhaps more strikingly marked than in any other of the replicas.

The ancient writers have also dwelt on the stern and somewhat gloomy expression of Plato's countenance. Three verses of a comedy by Amphis, a contemporary of Plato, are thus quoted by Diogenes:¹⁵

ὦ Πλάτων,

ὥς οὐδὲν οἶσθα πλὴν σκυθραπάζειν μόνον,
ὥσπερ κοχλίας σεμνῶς ἐπηρκῶς τὰς ὀφρύς.

This description perfectly agrees with the bust from Smyrna. M. Helbig thinks the word *κοχλίας* is corrupt, and writes: *Das Wort κοχλίας ist offenbar verdorben, da die Schnecke keine Augenbrauen hat und somit ausser Stande ist dieselben emporzuziehen.* I confess that I cannot share M. Helbig's opinion on this point. The word *κοχλίας* seems, on the contrary, quite correct and even ingenious: but the comparison is not—for it would be simply ridiculous—between Plato and a snail. The poet compares with the spiral of the snail's back the winding eyebrows of the philosopher, a likeness which may be perfectly understood by throwing a glance on the plate annexed to this article. By a similar metaphor, a winding staircase was called *cochlea*, and the name *κοχλίας* was also applied to the sinuosities of the human ear, *κοχλίας τῶν ὠτῶν ἢ ἐξῶθεν περιβολή*.¹⁶

Although the reverse of the Smyrna head is much injured, it seems certain that it belonged to a double hermes, and it was probably associated with a portrait of Sokrates. A double hermes of Sokrates and Plato was recently found at Chiusi,¹⁷ but is still inedited. A hermes in the Polytechnikon at Athens, also inedited, is thought by M. Helbig to represent Plato and Pythagoras, a supposition which I am not able to control.

As the finder or the purchaser of a work of art is allowed a certain amount of partiality toward his discovery, I will finish this note by expressing the opinion that the Smyrna Plato, although of late workmanship, is perhaps the most characteristic specimen in the series of sculptures which may claim the noble label ΠΛΑΤΩΝ, and remind the reader that it is the first, and as yet only one, which has been undoubtedly discovered on Hellenic soil.

SALOMON REINACH.

Saint-Germain en Laye, France.

¹⁵ DIOG. LAERT., III. 28; MEINEKE, *Fragm. comic. graec.*, III. p. 205.

¹⁶ Cf. STEPHANUS-DIDOT, *Thesaurus*, s. v.

¹⁷ HELBIG, *Bullettino dell' Inst.*, 1879, p. 232; *Jahrbuch*, 1886, p. 75.

ANTIQUITIES OF SOUTHERN PHRYGIA AND THE BORDER LANDS.^(*)

[PLATES II, III.]

II.

D. THE PHRYGO-PISIDIAN FRONTIER.

This frontier appears to have been the watershed on the north side of the Lysis. I have proved that the whole territory north of the watershed was Asian and Phrygian, and I have now to show that as soon as we cross it we are in Pisidian territory.

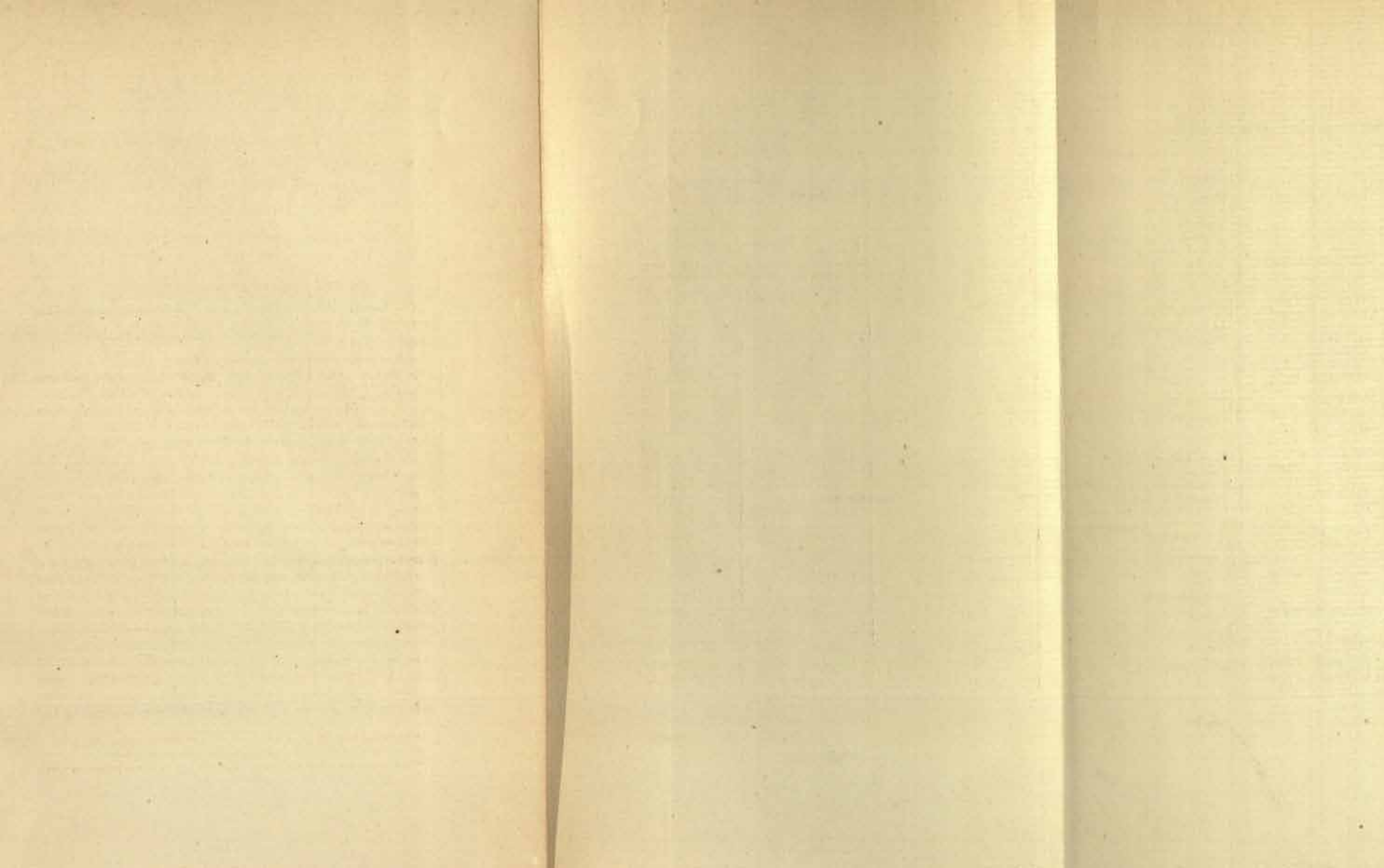
In discussing the boundary, it is necessary to essay the hard task of placing the cities of Pisidia. As usual, we start from the list of Hierokles. I have elsewhere proved⁶² that the division of Pamphylia into *Prima* and *Secunda* is older than Hierokles. The accompanying Table gives a comparison of the most important lists of cities in Pamphylia *Secunda*, arranged according to the order of Hierokles. The date of the various *Notitiae* must be determined approximately, in order to draw any historical inferences from the variations between them. Parthey claims to have arranged them in chronological order; he gives no reasons, but is, I presume, guided by the age of the MSS.: his arrangement does not agree with the evidence of the documents. In the *Notitiae* the bishoprics are arranged according to a fixed order: as changes were made in the order, they are inserted, but there are many cases in which both the new order and the old exist side by side in the same document: hence, different parts of the same *Notitia* may point to different dates. If we look at the order of dignity in the list of metropolitans and archbishops, the *Notitiae* must be arranged as follows:⁶³ *Not. VII* is older than the Schism (857 A. D.), but only a few years. *Not. I, VIII, IX* belong to the time of Photios (857-86 A. D.). Of these, *Not. I* gives an order of dignity for the metropolitans which is in some points earlier than *VIII-IX*.⁶⁴ *Not. III, X* give the order of dignity as settled by Leo

^(*) Continued from vol. III, p. 368.

⁶² *Mittheil. Athen.*, 1886, p. 345.

⁶³ I give here the results of a still incomplete study of the *Notitiae*.

⁶⁴ The note at the end of *Not. I* gives a date, 883 A. D. (which is probably correct),



COUNCIL OF CHALKEDON, A. D. 451.		EPIST. AD LEONEM, A. D. 458.	NOTITIAE VII, VIII.	NOTITIAE I, IX.	NOTITIA III.	NOTITIAE X, XIII.	COUNCILS, A. D. 325, 381, 431, 536.
Pergae	Perga	Perga	Πέργης	{ 1. Πέργης ἦτοι	{ 1. Πέργης ἦτοι	{ 1. Πέργης ἦτοι	Perge
Sillyi	Sillyon	Sillyon	19. Συλαίου	{ Συλαίου	{ Συλαίου	{ Συλαίου	Sillyon
Magydi	_____	_____	3. Μαγύδου	3. Μαγύδου	3. Μαγύδου	3. Μαγύδου	Magydos
{ _____	{ _____	{ _____	{ 2. Ἀταλίας. Ἀτταλείας	{ 2. Ἀτταλείας	{ 2. Ἀτταλείας	{ 2. Ἀτταλείας	{ Attalia
_____	Trebenna	_____	19. Περβαίνων. Περβένων	19. Περβαίνων	17. Περβαίνων	19. Περβαίνων	_____
_____	_____	_____	13. Δικητῶν. Δικητῶν	13. Δικητῶν	12. Ἀδικητῶν	13. Ἀδικητῶν	_____
{ Termessi et Eudociadis et	Termessus	Termessus	5. Τελμισσοῦ. Τελμισσοῦ	5. Τελμισσοῦ. Τελμισσοῦ	5. Τελμισσοῦ	5. Τελμισσοῦ	{ Termessos et Eudocias
{ Zobine	Eudoxia	Eudoxia	4. Εὐδοκιάδος. Εὐδοκιάδος	4. Εὐδοκιάδος	4. Εὐδοκιάδος	4. Εὐδοκιάδος	{ _____
_____	Pougla	_____	(Tertia)	(Pamphylia Tertia)	(Tertia)	(Tertia)	_____
Puglorum	_____	_____	14. Πούγλων	15. Πούγλων	13. Πούγλων	15. Πούγλων	_____
_____	_____	_____	17. Σανδίδου	17. Σανδίδου	15. Σανδίδου	17. Σανδίδου. Κανδίδου	_____
Isindorum	_____	_____	18. Βάρβης. Βάρβης	18. Βάρβης	16. Βάρβης	18. Βάρβης	Kyrbensis. Barbitanus
_____	_____	_____	6. Ἰσίνδου. Ἰσίνδου	6. Ἰσίνδου	6. Ἰσίνδου	6. Ἰσίνδου	Isinda
_____	_____	_____	8. Λαγίνων. Λαγίνων	8. Λαγίνων	18. Λαγίνων	8. Λαγίνων	_____
_____	Hadrianopolis	Hadrianopolis	15. Ἀδριανῆς	16. Ἀδριανῆς	14. Ἀδριανῆς	16. Ἀδριανῆς	Adriane
_____	Palaiopolis	Palaiopolis	9. Παλαιονπόλεως	9. Παλαιονπόλεως	19. Παλαιονπόλεως ἦτοι Ἀλκεροῦ	9. Παλαιονπόλεως ἦτοι Ἀλκεροῦ	Palaiopolis
Lysinaiorum	Lysinia	Lysinia	(Tertia)	(Tertia)	(Tertia)	(Tertia)	Lysinia
_____	Comana	Comana	(Tertia)	(Tertia)	(Tertia)	(Tertia)	Commacon
_____	_____	_____	(Tertia)	(Tertia)	(Tertia)	(Tertia)	Colbasa
Panemutichi	Panemouteichos	Panemouteichos	10. Κρημνοῦ	10. Κρημνοῦ. Κρημνῶν	8. Κρημνῶν	10. Κρημνῶν	Panemouteichos
_____	_____	_____	(Tertia)	(Tertia)	(Tertia)	(Tertia)	_____
Ariassi	Ariassos	Ariassos	14. Ἀριασσοῦ. Ἀρητῶν	14. Ἀριασσοῦ	10. Ἀριασσοῦ	14. Ἀριασσοῦ	Ariassos
{ _____	{ Maximianopolis	{ Maximianopolis	{ 7. Μαξιμιανουπόλεως	{ 7. Μαξιμιανουπόλεως	{ 7. Μαξιμιανουπόλεως	{ 7. Μαξιμιανουπόλεως	{ Maximianopolis
_____	(Tertia)	(Tertia)	(Tertia)	(Tertia)	(Tertia)	(Tertia)	_____
_____	(Tertia)	(Tertia)	(Tertia)	(Tertia)	(Tertia)	(Tertia)	_____
Codrulorum	Codroula	Codroula	{ 11. Κοιδοῦλων	{ Κοιδοῦλων	9. Κοιδοῦλων	{ 11. Κοιδοῦλων	_____
_____	_____	_____	{ Κοιδοῦλλον	{ Κοιδοῦλλον	{ Κοιδοῦλλον	{ Κοιδοῦλλον	_____
_____	Pellensis	Pellensis	(Pamphylia Prima)	(Prima)	(Prima)	(Prima)	_____
_____	_____	_____	12. Πελτινισσοῦ	11. Πελτινισσοῦ	12. Πελτινισσοῦ	12. Τερτινισσοῦ	Pentenessensis
_____	_____	_____	Πελτινισσοῦ	_____	_____	_____	_____

the Wise (886-911). *Not. XIII* gives the order of dignity as settled by Andronikos Palaiologos (1282-1328).

If, however, we look at the lists of bishops subordinate to the various metropolitans,⁶⁵ the *Notitiae* fall into two sharply distinguished classes, *I, VII, VIII, IX*, and *III, X, XIII*. In several provinces, *VII, VIII, IX* resemble each other more than *I*, while *III, X, XIII* are almost always very intimately related to each other: there are therefore, in general, three classes, *VII, VIII, IX; I;* and *III, X, XIII;* but in Pamphylia Secunda *VII* and *VIII* are closer, and *IX* and *I* form the second class, though the differences of the *Notitiae* in this province are exceedingly slight. There can be no question that *VII* is the oldest *Notitia*, and *III, X, XIII* the latest. As to the exact period to which the lists of Pamphylia Secunda belong, those of *III, X, XIII* are not earlier than A. D. 1084, when Attaleia became metropolis of the province; *I* is dated 883; and *VII* is probably about 850.

In the Table, I have tacitly corrected some errors in the *Notitiae*, which are, as I think, due to the transcribers: I have, however, allowed all the errors of spelling and accent to remain. In *Not. VII*, Magydos is omitted by accident, and Dikitanaura transferred from 13 to 16. In *Not. VIII*, Pogla is accidentally omitted. In *Not. IX*, which is almost identical with *Not. I*, Sillyon is repeated as No. 19, on the analogy of *VII, VIII*, where it has that place. In *Not. III*, the order varies considerably from all other *Notitiae*: the reason is probably an error of the scribe, though it may possibly be a real change made in the order of dignity. So the order of dignity in Phrygia Salutaris was entirely changed. In the Councils later than 536 A. D., hardly any bishops of Pamphylia appear: this probably shows a decline in the civilization and the importance of the provinces. Examination of the several bishoprics proves that this decline was far more serious and early in Pamphylia than in the northern provinces.

Hierokles enumerates first the cities of the coastland of Pamphylia proper, then the cities in the valley of the Tauros (Istanos Su). With the next two names, *Μνωδία* and *Χωρία Μιλναδικά*, he passes to the hilly country between the Tauros and the Lysis. *Μνωδία* is obviously a false form: I consider it a dittography of *Μιλναδικά*, and find Lagbe

and a remark about the order of dignity, which is false (comp. *Not. II* with its introductory note).

⁶⁵ I give here the result of an examination strictly confined to the Anatolian provinces.

(whose site is well known) summed up with some other small hill-towns⁶⁶ as *Χωρία Μιλυαδικά*. Hierokles then goes down the course of the Lysis with the names Olbasa, Palaiapolis, Lysinia, and thence passes southeast and east to Komama, Kolbasa,⁶⁷ Kremna, and Panemonteichos. So far, the enumeration is perfectly regular, but, as in several other cases in Hierokles, the end of his list gives outlying towns in a less regular order. The northwest frontier has been omitted, and here we find Ariassos, Maximianopolis with the dittography *Ktēma Maximianoupoleos*, Regesalamara and Limobrama. Finally, we have the three towns on the east frontier, Kodroula, Isba, and Pednelissos.

D. 1-4. PERGA and SILLYON are united in one bishopric from *Not. I, IX* onwards: this entry has not yet been made in *Not. VII, VIII*, from which we may conclude that the union took place about 950-80. It was caused by the gradual desolation and desertion of the cities: a process which was completed in A. D. 1084, when ATTALEIA was made a metropolis. Considering the state of the Empire in the twelfth century, it is probable that all other bishops of the province were merely historical survivals. Yet, if we accepted the *Notitiae* literally, we should believe that Perga was still the metropolis of a province, and that Attaleia became an independent bishopric. Only *Not. IV* gives the true state of affairs: *ὁ Συλαίου ὁς καὶ Πέργης λέγεται, ἀνθ' οὗ ἐνι νῦν ὁ Ἀτταλίας*. SIDE also, metropolis of *Pamphylia Prima*, seems to have sunk into decay not much later. After being degraded from tenth to thirteenth in the list of metropoleis, in order to make room for Philadelphieia (1283-1321), it entirely disappeared from the order of Andronikos Palaiologos Junior (1328-41), and its rank in the order of dignity was given to Monembasia, as metropolis of the entire Peloponnesos.

D. 5. The site of OLBIA is fixed by a passage of Strabo (p. 666). In Hierokles, *Δήμου Οὐλιάμβου* seems to be a corruption: and, if we read *Δήμου Ὀλβιανού* or *Ὀλβιανῶν*, the geographical order is preserved. Olbia is not mentioned in the *Notitiae*: it must have been incorporated under Attaleia.

D. 6, 7. DIKITANAURA (the correct form is doubtful) and TREBENNA. On these, see my remarks in *Mittheil. Athen.*, 1886.

D. 8. The name Ἰοβία is, I think, a mere epithet of TERMESSOS, dating from the time of Diocletianus Jovius: in earlier ecclesiastical

⁶⁶ One lies beside Tashkessé, close to the sources of the Kolobatos.

⁶⁷ The similarity of the first syllables has perhaps caused a transposition of the first two names.

documents the phrase (ἐπίσκοπος) Τερμησσοῦ καὶ Εὐδοκιάδος καὶ Ἰοβίας led to the false form in Hierokles: the city boasted of the double title *Jovia et Eudocias*. It is true that Termessos and Eudocias are distinguished in all the *Notitiae* and in the signatures to the *Epistola ad Leonem Imperatorem*: but they always occur side by side, and I believe the distinction to arise from an error of the scribe. The legend ΗΤΟΚΑΠΟΥΧΕΧΟΥΚΑ on coins of Termessos, should be explained, I think, ἡ τὸ κάπους ἔχουσα: the city boasted of possessing 370 gardens or country estates. Such gardens, *baghtche*, often exist at the present day in numbers, even at a considerable distance from the town to which they belong.

D. 9. The people PERMINODEIS. To the five published inscriptions from the Hieron of Apollon Perminodension (*Mittheil.*, 1886, A. H. S., 23), I have to add the following: all are roughly scratched on the rocks:

- | | | |
|-----|--------------------|---------------|
| (6) | ΜΑCΙΚΑΙ | Κιδρα]μᾶς καὶ |
| | ΙΟΥΛΙC | Ἰούλι(ο)ς |
| | ΑΠΟΛΩ | Ἀπόλ(λ)ω- |
| | ΝΙΠΑΤΡΙ | νι πατρὶ |
| | ΚΗΝΕΥΧΗ | ... εὐχῆ- |
| | N | ν |
| (7) | ΓΛΙΟCΟΙΙ | Γάιος Ο... |
| | ΟCΕΥΓΕΝΙΩ | ος Εὐγενίου |
| | ΥΙΠΕΡC | ὑπὲρ σ[ωτη- |
| | Ι ΝΦΙΓ | ρίας? |
| | ΕΥΧΗΝ ^α | εὐχὴν. |
| (8) | ΥΠΕΡΥΙΟΥCΩ | ὑπὲρ υἱοῦ Σω- |
| | CΙΔΩΡΟ/// | σιδώρου. |

This inscription is complete except the final letter.

Beside these, such fragments as the following were abundant:

- | | | |
|------|--------|------------|
| (9) | ΕΥΧΗΝ | εὐχὴν |
| | ΑΠΟΛΛΩ | Ἀπόλλω- |
| | ΝΙ | νι |
| (10) | Δ | Δ[ημήτριος |
| | ΠΟΛΛΩ | Α]πόλλω[νι |
| | ΧΗΝ | εὐ]χὴν. |
| (11) | ΕΥΧΗΝ | εὐχὴν |

^α 3, ΠΕ *liée*, as a large Π and small Ε.

D. 10. **POGLA** is usually called Pougla in Byzantine times: the modern name is Fougla or Foulla (with the first *l* distinctly guttural). Its inscriptions are (1) *C. I. G.*, 4367 *d*; ⁶⁹ (2) *Mittheil. Athen.*, p. 337; (3) *C. I. G.*, 4367 *f*; and *A. H. S.*, No. 41; (4) *A. H. S.*, 39; (5) *A. H. S.*, 40; (6) was copied by me in 1884:

///ΥΛΗΚΑΙΟΔΗ///	[ἡ βο]υλή καὶ ὁ δῆ[μος]
ΕΤΕΙΜΗCΕΝΞΕΠΤΙΜΙΑΝΑΡ	ἐτείμησεν Σεπτιμίαν Ἀρ-
ΜΑΞΤΑΝΤΗΝΑΞΙΟΛΟΓΟΝΔΗ	μάσταν τὴν ἀξιόλογον δη-
ΜΙΟΥΡΓΟΝΓΕΝΟΥΞΛΑΜΠΡΟΥ	μουργὸν γένους λαμπροῦ
5 ΚΑΙΕΝΔΟΞΟΥΚΑΙΤΟΥΤΡΩΤΕ	καὶ ἐνδόξου καὶ τοῦ πρωτε[ύ-
ΟΝΤΟΣΠΑΡΗΜΕΙΝΤΟΥΠΑΤΡΟ	οντος παρ' ἡμεῖν τοῦ πατρὸς
ΑΥΤΗΣΕΡΜΕΟΥΑΤΤΕΟΥΞΜΕ	αὐτῆς Ἑρμέου Ἀττέου με-
ΤΑΚΑΙΕΤΕΡΩΝΩΝΠΑΡΕCΧΕ	τὰ καὶ ἑτέρων ὧν παρέσχε[ι-
ΤΟΤΗΠΟΛΕΙΚΑΤΑΛΙΠΟΝΤΟΞ	το τῇ πόλει καταλιπόντος
10 ΔΕΚΑΙΕΙΞΔΙΑΝΟΜΑΞΤΗ■Ε	δὲ καὶ εἰς διανομὰς τῇ [τ]ε
ΙΕΡΑΒΟΥΛΗΚΑΙΤΗΕΚΛΗΣ	ιερά βουλῇ καὶ τῇ ἐκ[κ]λησ[ί-
Α*ΑΦΚΑΙΑΥΤΗΝΑΡΜΑΞ	α *αφ' καὶ αὐτῇ ἡ Ἀρμάσ-
ΤΑΥΤΕΡΩΝΕΦΙΛΟΤΕΙΜΗ	τα ὑπὲρ ὧν ἐφιλοτειμή-
ΞΑΤΟΥΠΕΡΔΗΜΙΟΥΡΓΙΑΞ*ΔΦ ⁷⁰	σατο ὑπὲρ δημουργίας *δφ'
15 ΕΥΝΟΙΑΞΕΝΕΚΕΝΤΗΞΕΙΞΤΗΝ	εὐνοίας ἔνεκεν τῆς εἰς τὴν
ΠΑΤΡΙΔΑ	πατρίδα

(7) Is published *C. I. G.*, 4367 *e* and *g.*, which are two parts of one text. As Schönborn's copy is incomplete and not wholly accurate, and as the text is badly interpreted by Franz, I add it in full:

EYXPOΜΙΟΥ
/////////ΕΚΑΙΔΗΜΟΥ/Ο/////////ΙΑΡΧΙΕΡΕΑΚΑΙ
ΑΓΩΝΟΘΕΤΗΝΤΩΝCΕΒΑCΤΩΝΑΥΡΑΡΤΕΙ ΜΙΑΝΟΝΔΙΑΙΤΡΙΑΝΟΝΑΡΤΕΙΜΑΝΚΑΙΑΥΡ ΑΡΤΕΜΕΙΝΤΡΟΙΛΟΥΤΡΟΚΟΝΔΟΥΕΡΜΑΙΟΥΔΗΜΙ ΟΥΡΓΗCΑΝΤΑCΚΑΙΚΤΙCΑΝΤΑCΚΑΙΤΑCΛΟΙΠΑC ΠΑCΑCΑΡΧΑCΚΑΙΛΕΙΤΟΥΡΓΙΑCΤΕΛΕCΑΝΤΑC ΑΚΟΛΟΥΘΩΞΤΟΙΞΥΗΦΙΞΜΑΞΙΝΤΟΥCΔΕΑΝ ΔΡΙΑΝΤΑCΑΝΕCΤΗΞΑΝΑΥΡΡΑΛΟΝΓΕΙΝΟCΚΑΙ ΑΡΤΕΙΜΑCΟΚΑΙΕΡΜΑΙΟCΟΙΥΙΟΑΥΤΩΝ

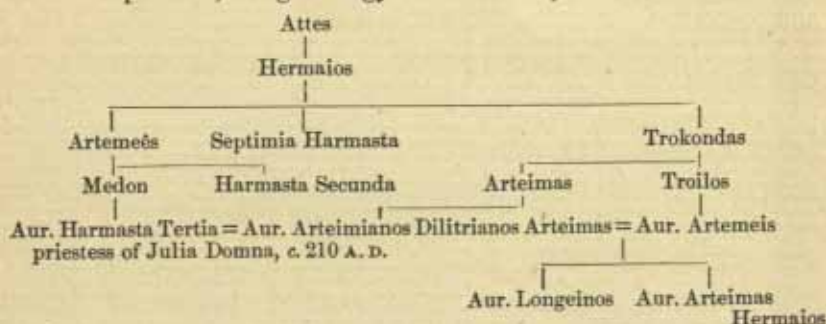
⁶⁹ ΞΟΥΕΙΜΟΥ, the reading of Schönborn is correct, and should not be altered to get a Greek name Σερεῖμου.

⁷⁰ ΔΦ or ΑΦ uncertain: more probably Δ.

Ἐυχρομίον.⁷¹

Βουλῇ]ς καὶ δήμου [δ]ό[γματ]ι, ἀρχιερέα καὶ
 ἀγωνοθέτην τῶν Σεβαστῶν, Αὐρ. Ἀρτεϊ-
 μιανὸν Διλιτριανὸν Ἀρτείμαν καὶ Αὐρ.
 Ἀρτέμειν Τροίλου Τροκόνδου Ἑρμαίου δημι-
 ουργήσαντας καὶ κτίσαντας καὶ τὰς λοιπὰς
 πάσας ἀρχὰς καὶ λειτουργίας τελέσαντας
 ἀκολουθῶς τοῖς ψηφίσμασιν· τοὺς δὲ ἀν-
 δριάνας ἀνέστησαν Αὐρήλιοι Λονγεῖνος καὶ
 Ἀρτείμας ὁ καὶ Ἑρμαῖος οἱ υἱοὶ αὐτῶν

Dilitrianos and Artemeis are the same pair who are mentioned in No. 2: *κτίσαντας* implies that they had founded some benefaction for the State, and acquired the title of *κτισταί*. In No. 2, Dilitrianos is said to be son of Artemimas, archiereus and ktistes. In No. 3, we have the same Aur. Artemianos Dilitrianos Artemimas with a wife, Aur. Harmasta Tertia, whose date is fixed by her being priestess of Hera the Empress, *i. e.*, Julia Domna (cp. A. H. S., No. 12). Unless, therefore, there were two persons, father and son, each named Aur. Artemianos Dilitrianos Artemimas (of whom one is mentioned as father of Longeinos and Artemimas Hermaios, the other as son of Artemimas the high-priest), which seems highly improbable, Dilitrianos must have had two wives, Aur. Harmasta and Aur. Artemeis. If we connect Septimia Harmasta (No. 6) with Harmasta Tertia by an intermediate Harmasta Secunda, and identify the double Artemimas and Hermaios, who appear as contemporaries, the genealogy of this family is as follows:



In the following inscription (No. 8) there occurs Hermaios, son of Artemimas and grandson of Trokondas: he must be a brother of Dilitrianos, and his son Attis was honored with a statue about A. D. 280:

⁷¹ This word seems to have stood isolated in the middle of the line. The stone is injured on left, but complete on right, in this line.

(8) Copied by me in 1884 :

//////////

ΕΤΕΙΜΗΣΕΝ ΑΤΤΗΝΕΡΜΑΙ
ΟΥΑΡΤΕΙΜΟΥΤΡΟΚΟΝΔΟΥ
ΑΝΔΡΑΓΕΝΟΥΞΑΡΧΙΕΡΑΤΙ
ΚΟΥΚΑΙΔΕΚΑΠΡΩΤΙΚΟΥΑΤΤ
ΠΡΟΓΟΝΩΝΦΙΛΟΠΑΤΡΕ
ΩΝΚΑΙΦΙΛΟΤΕΙΜΟΝΤΟΝ
ΔΕΑΝΔΡΙΑΝΤΑΑΝΕΞΤΗ
ΞΕΝΕΡΜΑΙΟΣΑΤΤΗΕΡΜΑΙ
ΟΥΑΡΤΕΙΜΟΥΟΥΙΟΣΑΥ
ΤΟΥΜΝΕΙΑΞΧΑΡΙΝ

[ἡ βουλὴ καὶ ὁ δῆμος]
ἐτείμησεν Ἀττην Ἑρμαί-
ου Ἀρτείου Τροκόνδου
ἄνδρα γένους ἀρχιερατι-
κοῦ καὶ δεκαπρωτικοῦ ἀπ[ὸ
προγόνων φιλοπάτρε-
ων καὶ φιλοτείμων· τὸν
δὲ ἀνδριάντα ἀνέστη-
σεν Ἑρμαῖος Ἀττη Ἑρμαί-
ου Ἀρτείου ὁ υἱὸς αὐ-
τοῦ μνείας χάριν.

(9) Copied by me in 1884 :

ΑΥΡΕΡΜΕΟΣΟΚΕ
ΔΗΜΑΡΧΟΣΚΑΙ
ΑΥΡΕΡΜΙΑΝΟΣΑΝ
ΤΩΝΙΑΝΟΣΑΓΩ
ΝΙΣΑΜΕΝΟΙΕΝΔΟ
////ΕΝΕΙΚΗΞΑΝΤΕΞ
ΚΑΙΞΥΣΤΕΘΕΝΤΕΞ
ΠΑΙΔΩΝΠΑΝΚΡΑ
ΑΓΩΝΟΣΠΕ
ΙΚΟΥ

Αὐρ. Ἑρμ(αῖ)ος ὁ κέ
Δήμαρχος καὶ
Αὐρ. Ἑρμιανὸς Ἀν-
τωνιανὸς, ἀγω-
νισάμενοι ἐνδό-
ξως, νεικήσαντες
καὶ συστεθέντες
παίδων πανκρά-
τιον] ἀγῶνος πε[ν-
ταετηρ]ικοῦ.

The form *συστεθέντες* is due to a confusion between *συντεθέντες* and *συσταθέντες*.

The high-priest of the Emperors, as *ἀγωνοθέτης*, celebrated a pentetetic festival and games: the office of high-priest therefore lasted probably four years. It is probable that the high-priest was an official of the province of Pamphylia, who celebrated a pentetetic festival of the province, and who is mentioned, in inscriptions of Attaleia, as *ἀρχιερεὺς τῶν Σεβαστῶν καὶ ἀγωνοθέτης τῶν μεγάλων πενταετηρικῶν ἀγώνων*,⁷² and who is identical with the official called *Παμφυλιάρχης*, as the *Ἀρχιερεὺς τῆς Ἀσίας* is with the *Ἀσιάρχης*. These inscriptions show that the chief magistrate of Poglā was the eponymous archon; and that there were also a demiourgos, a dekaprotos, etc. . Beside the cultus

⁷² See the inscr. published by me *Bull. Corr. Hell.*, 1883, pp. 263-5; also 1886, p. 150. It is of course possible that the *ἀρχιερεὺς* is a priest of a local cultus of the Emperors, but I think the view in the text is more probable.

of the Emperor, with its ἀρχιερεύς and ἀρχιερεία, there was in the city a priestess of the Empress Hera (Julia Domna), a priest of Zeus Megistos, a priest of the Good Fortune of the Emperors.

The names at Pogla show a close analogy to those of Termessos. I give the name Ἀρμάστα with Franz, rather than Ἀρμαστα with Lebas-Wadd., 1206. I have preferred the nominatives Ἀττέης of genit. Ἀττέους, Ἀρτεμέης of gen. Ἀρτεμέους, Τεαττέης of gen. Τεαττέους, on the analogy of Ἡρακλέους (C. I. G., 4366) Περικλέους (C. I. G., 4366d), rather than Τεαττεύς as Lebas-Wadd., 1210: perhaps Ἀττήs, Ἀρτεμήs, Τεαττήs would be still more accurate.

(10) Copied by me in 1884: broken right and left:

MANIKONMEΓICTONAPXIEPEA
TEPAKACTPΩN HBOYΛHK

[Μ. Αὐρήλιον Αντωνεῖνον, κ.τ.λ. Γερ]μανικὸν Μέγιστον, ἀρχιερέα [μέγιστον, κ.τ.λ. καὶ Ἰουλίαν Δόμνην μη]τέρα Κάστρων· ἡ βουλὴ κ[αὶ ὁ δῆμος].

(11) Copied by me in 1884: broken on left:

ΑΥΤΟΚΡΑΤΟΡΩΝ
ΥΛΙΑΞΔΟΜΝΗΞΞΕΒΑΣΤΩΝ
ΔΩΝ

ὑπὲρ σωτηρίας τῶν]αὐτοκρατόρων [Λ. Σεπτιμίου κ.τ.λ. καὶ Μ. Αὐρηλίου κ.τ.λ. καὶ Ἰο]υλίας Δόμνης Σεβαστῶν [μητρὸς καὶ στρατοπέ]δων.

(12) On a stone in a cemetery between Zivint and Pogla: this stone is nearer Pogla than any other site, but may perhaps belong to Ouerbe:

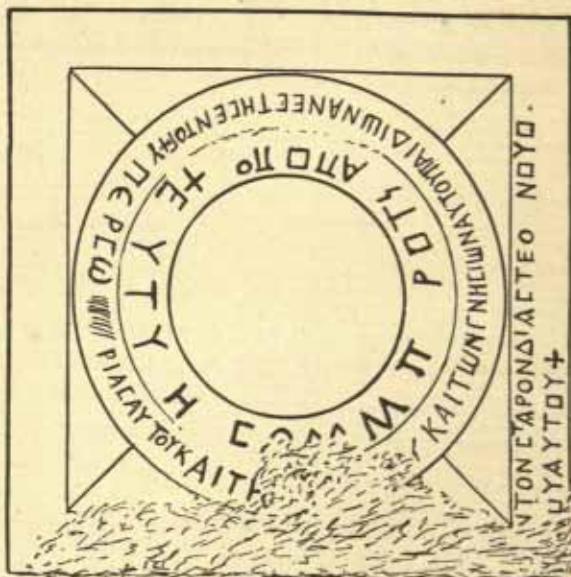
ΑΥΤΟΚΡΑΤΟΡΑΚΑΙΞΑΡΑΤΡΑΙΑΝΟΝ	Αὐτοκράτορα Καίσαρα Τραιανὸν
ΑΔΡΙΑΝΟΝΟΛΥΜΠΤΙΟΝΞΕΒΑΣΤΟΝ	Ἀδριανὸν Ὀλύμπιον Σεβαστὸν
ΟΣΑΕΙΣΑΤΤΑΝΩΙΟΥΦΙΛΟΚΑΙΞΑΡ	Ὅσαεῖς Ἀττανωίου φιλόκαισαρ
ΚΑΙΦΙΛΟΠΑΤΡΙΣΑΠΟ[]ΟΓΟΝΩΝ	καὶ φιλόπατρις ἀπὸ [πρ]ογόνων
ΟΔΙΑΒΙΟΥΙΕΡΕΥΞΕΚΤ[]ΝΙΔΙΩΝ	ὁ διὰ βίου ἱερεὺς ἐκ τ[ῶ]ν ἰδίων

(13) Copied by me in 1884:

ΑΥ· ΑΧΙΛΛΕΥΞ
ΑΣΚΛΗΠΙΑΔΟΥ
ΑΤΡΟΣΖΩΝΙ
ΑΥΤΩΚΑΤΕΓ
ΗCΕΤΟΑΝΓ[]
ΙΟΥΑ[]Α
ΔΟΞ

Αὐ(ρήλιος) Ἀχιλλεύς
Ἀσκληπιάδου
ἱ]ατρὸς ζῶν [ἐ
αυτῷ κατέσ-
τ]ησε τὸ ἀνγ[εῖ-
ον τ]οῦ? Ἀ[σκλη]ᾶ
δος?

(14) Copied by me in 1884: on the basis of a small column, much broken:



Εὐτύ[χ]ης ὁ λαμπρότ(ατος) ἀπὸ π(ριμικηρίων) ὑπὲρ σω[τη]ρίας αὐτοῦ καὶ τῆς γυναικὸς αὐτοῦ καὶ τῶν γυησιῶν αὐτοῦ παιδίων ἀνέστησεν τοῦτον τὸν στα[υ]ρὸν διὰ Στε[φά]νου [υἱοῦ]?? αὐτοῦ.

D. II. ANDEDA is still called Andia. Inscriptions (1) and (2) in *Mittheil. Athen.*, 1886, p. 337-8; (3) *C. I. G.*, 4367h; (4) *A. H. S.*, 38.

(5) on a fragment of entablature (broken right and left) from a heroön:

ΛΙΑΧΛΙΔΗΤΗΓΥΝΑΙΚΙΚΑΙΤΟΙΞΙΔΙ

[Μ. Πλάνκιος Λέλεξ κατεσκεύασεν ἐαυτῷ καὶ Ἰου]λία Χλίδῃ τῇ γυναικὶ καὶ τοῖς ἰδί[οις τέκνοις].

(6) Smith-Ramsay, 1884:

////////////////

ΕΤΕΙΜΗΣΕΝ

Μ ΟΝΑΕΛΕΓΑ

/////////////////ΦΙΛΟ

////////////////

[ἡ βουλή καὶ ὁ δῆμος]

ἐτείμησεν

Μ. [Πλάνκι]ον Λέλεγα

[φιλότειμον καὶ] φιλό-

[πατρὶν ἀρετῆς ἕνεκεν].

Lelex and Chlide are honored also in inscriptions of Ouerbe (1) and (2). Andia and Ouerbe were neighboring cities, and the same rich

family was connected with both. M. Plankios Kornelianos Gaios [Andeda (2)] officiated as high-priest of the Emperors for both Andeda and Ouerbe: this suggests that the cities of the province were obliged to find in rotation some one to fill that honorable but expensive office.

(7) Copied by me in 1884:

////////ΘΕΝΙ

ΙΟΥΛΥΡΑΓΡΙΠΤΙ

ΚΑΙΛΟΝΓΟΥΕΞΥΠ

ΧΧΕΧΕΩCΤΟΥΠΤΑΤ

ΠΟΥΑΥΤΩΝΛΟΝΓΟΛ

ΑΥΡ

ΚΑCΙΑΝΟCΕΡΜΙ

ΑΝΟCΝΕΙΚΗCΑC

ΠΑΙΔΩΝΠΑΛΗΝ

ΕΝΔΟΞΩCΑΠΤΤΩ

ΤΟC ΜΕCΟΛΑΒΗ

ἀνατε]θέν[τα

ὑπ[ὸ Λύρ. Ἀγρίπ[πα

καὶ Λόνγου ἐξ ὑπ[ο-

σχέσεως τοῦ πάπ-

που αὐτῶν Λόνγου

Αυρ.

Κασσιανὸς Ἑρμι-

ανὸς νεικήσας

παίδων πάλην

ἐνδόξως ἄπτω-

τος μεσολαβή[σας

A wealthy Termessian family also bore the name Agrippa (*C. I. G.*, 4366 a, c, e, f).

(8) Copied by me in 1884;

ΑΥΡΗΛΙCΚΕ

ΜΑΡΚΙΑΚΑΛ

ΛΙΜΑΧΩΥΙΩ

ΜΝΗΜ

Αὐρήλλι(ο)ς κέ

Μαρκία Καλ-

λιμάχῳ υἱῷ

μνήμ[ης χάριν.

D. 12. OUERBE.—To the remarks under Andeda, and the three inscriptions, A. H. S., 254, I have only to add the following epitaph, which I copied in 1884 in a garden near Zivint:

ΙΟΥΛΙΟΝΑΝΘΗΔΟΝΑ

ΞΕΚΟΥΝΔΑ Η΄ΥΝΗΑΥ

ΤΟΥ ΜΝ-ΜΕΧΑΡΙΝ

Ἰούλιον Ἀνθηδόνα

Ξεκούνδα ἡ γυνὴ αὐ-

τοῦ μνήμης χάριν

D. 13. ISINDA (See *Mittheil. Athen.*, 1886).—The modern name Istanos is probably εἰς τὰ Στενά. The name occurs twice in my knowledge: six hours west of Angora is a village Istanos. In both cases a river flows through a narrow gap between two rocky hills. To the two inscriptions published by A. H. Smith, I have only to add a few letters on a fragment of entablature:

//////ΟCΚΑΥ//////

D. 14. LAGBE, LAGOUE, or LAGOE, is fixed at Ali Fachreddin Yaila by two inscriptions. The first (Spratt and Forbes, I, p. 250; and Lebas-Wadd., 1211), Δῆμος Λαγβέων [Μητρὶ] Λαγβηνῇ εὐχὴν,⁷² was found at Manni, a village a little south of the site. The second was found at the actual site engraved on the side of a rock-tomb (text below, No. 2). Lagbe never occurs in Byzantine lists: but in all the *Notitiae* we have ὁ Λαγίνων (ἐπίσκοπος). A city Lagina is inadmissible: comparing such false forms as ὁ Βριάνων, ὁ Κολώνης,⁷⁴ we see that ὁ Λαγηνῶν or ὁ Λαγγηνῶν is the correct form, either with assimilation of γβ, or through a form Λαγοηνῶν. Hierokles, as we saw, includes Lagbe with the other villages of the district, which were under the same bishop, in the title χωρία Μιλυαδικά.

The obvious inference, that Lagbe is Livy's Lagon, has been drawn both by Prof. Kiepert and by M. Waddington: the former writes the name Lagoe, the latter Lagbe; both may be correct.⁷⁵ Polybios may have used the form Λαγὴ or Λαγούη to represent the Pisidian name; and the text of Livy ought to be Lagon. It is also possible that Λάγβος or Λάγβον is the proper form, and that the text of Livy should read Lagbon.

A coin mentioned by M. Waddington reads ΛΑΓΒΗΝΩΝ.⁷⁶

(2) A. H. S., 34: on a rock-tomb at Lagbe (Smith-Ramsay 1884):

ΑΥΡΜΗΝΙCΜΑCΑΝ
ΤΟCΚΟΔΙΠΟΥΛΑΓΒΟΥ
ΚΑΤΕCΚΕΥΑCΕΝΤΗΝCΩ
ΜΑΤΟΘΗΚΗΝΕΑΥΤΩ
ΕΤΗΓΥΝΕΚΙΑΥΤΟΥ
ΑΥΡΑΡΤΕΜΕΙΚΕ
ΤΕΚΝΩΜΟΥΡΔΙ
ΝΙΕΤΕΡΩΔΕΟΔΝΙ
ΕCΤΕΕΤΕΡΟΝΠΤ
ΕΠΙΒΑΛΕCΤΙΑΠΤΕΙCΙ

Αὐρ. Μῆνις Μασάν-
τος Κοδιπὸν Λάγβου (? εὐς ?)
κατεσκεύασεν τὴν σω-
ματοθήκην ἑαυτῷ
κ] ἐ τῇ γυνεὲ ἀυτοῦ
Αὐρ. Ἀρτεμεὶ κέ [τῷ
τέκνῳ μο[υ Α]ὐρ. Δί[ω-
νι· ἐτέρῳ δὲ ο[ὗ]δ[ε]νι
ἔστε ἕτερον πτ[ῶμα
ἐπιβάλε, ἐπ(ε)ὶ ἀπο[τ]εῖσ(ε)ι

⁷² M. WADDINGTON prints it as two fragments of one inscription; it seems, however, to require only Μητρὶ or Θεᾷ to make it complete.

⁷⁴ Βρία and Κολῶη are the cities: hence the correct expressions are δ Βριανῶν, δ Κολοηνῶν.

⁷⁵ It is quite common to find B in later coins and inscriptions take the place of Y or OY in earlier. Lagbe is omitted from the lists in HEAD, *Hist. Num.*

⁷⁶ LEBAS-WADD., 1211. Omitted by HEAD, *Hist. Num.*

////////ΩΤΑΤΩΤΑΜΙΩ
 ΑΥΡΚΡΑΤΕΡΟCΜΗΝΙΔΟCΚΟ
 ΙΙΩΝΟCΚΑΤΕCΚ ΕΝ
 ΤΗΝ CΩΜΑΤΟΘΗΚΗΝΕΑΥ
 ΤΩΖΩΝΚΑΙΤΗΓΥΝΑΙΚΙΑΥ
 ΤΟΥΑΥΡΑΡΤΕΜΕΙΚΑΙΤΟΙCΤΕ
 ΚΝΟΙCΜΟΥΑΥΡΤΡΟΚΟΝΔΑ
 ΚΑΙΕΡΜΑΙΩΚΑΙΚΡΑΤΕΡΩΕΤΕ
 ΡΩΔΕΟΥΔΕΝΙΕΞΟΝΕCΤΑΙΕ
 ΠΙCΕΝΕΝΚΑΙΠΤΩΜΑΕΠΠΕΙΥ
 ΠΟΚΕΙCΕΤΕΠΡΟCΤΕΙΜΟΥ
 ΤΩΙΕΡΩΤΑΤΩΤΑΜΙΩ*ΒΦ
 ΚΑΙΤΗΚΙΒΥΡΑΤΩΝΠΟΛΕΙ*ΑΦ
 ΚΑΙΤΩΚΑΤΑΤΟΠΟΝΜΙCΘΩ

τῷ ἱερ]ωτάτῳ ταμίῳ [δηνάρια φ'.
 Αὐρ. Κρατερὸς Μήνιδος Κό-
 μ]ωνος κατεσκ[εύασ]εν
 τὴν σωματοθήκην ἐαυ-
 τῷ ζῶν καὶ τῇ γυναικὶ αὐ-
 τοῦ Αὐρ. Ἀρτεμεί καὶ τοῖς τέ-
 κνοις μου Αὐρ. Τροκόνδα
 καὶ Ἑρμαίῳ καὶ Κρατερῷ, ἐτέ-
 ρῳ δὲ οὐδενὶ ἐξὸν ἔσται ἐ-
 πισπένει καὶ πτόμα ἐπεὶ ὑ-
 ποκείσεται προστείμου
 τῷ ἱερῷτάτῳ ταμίῳ (δηνάρια) βφ'
 καὶ τῇ Κυβυρατῶν πόλει (δηνάρια) αφ'
 καὶ τῷ κατὰ τόπον μισθῷ.

Two districts of this province are entitled Kabalis and Milyas. Kabalis immediately adjoins Phrygia on the south : it was usually considered a district of Pisidia, but, under the Roman Empire, Pisidia ceases to exist politically and Kabalis was part of the province Galatia under Augustus and the early emperors. It was transferred to the province Lycia-Pamphylia, probably at the constitution of that province by Vespasian (perhaps the year 71 A. D.). From this time onwards till the provinces were replaced by Themes, Phrygia and Pamphylia adjoined each other. South and southeast of Kabalis is the district Milyas. In Livy xxxviii. 15 it is distinctly implied that Milyas forms part of Pamphylia, but it is probable that this arises merely from Livy's loose language and his ignorance of the country. Strabo (p. 666) considers Milyas part of Pisidia.⁷⁷ The towns of Milyas are almost all fixed by epigraphic evidence, and this furnishes a firm basis for the topography of Pamphylia Secunda. In Kabalis, which is almost unknown to history, we have hardly any literary evidence to help in placing the ancient names ; and the inscriptions give very little topographical information.

D. 15. **OLBASA** was discovered by Schönborn, and again described by MM. Duchesne and Collignon. Its situation and remains mark it as the chief city of the valley, and it was certainly in existence under

⁷⁷ Cities of *Milyas* are Isinda, Lagbe, Ouerbe, Pogla, Andeda, Komama, Kremna, Kodroula? Kretopolis? Cities of *Kabalis*, Olbasa, Ariassos, Palaiapolis, Lysinia, Kolbasa; the tribe Ormeleis belongs to Kabalis, the tribe Perminodeis to Milyas.

the Byzantine Empire: but, except in Hierokles, it is mentioned in no Byzantine list. Every other town in Pamphylia of the slightest importance occurs in the Council-lists of the fifth and sixth centuries, and it is inconceivable that Olbasa should be omitted: in the *Notitiae* also Olbasa fails. The explanation must be that it occurs under some other name. A bishopric Adriane occurs in all the *Notitiae* and in several Council-lists: from its frequent occurrence it must have been a place of some importance, and cannot therefore be identified with such obscure places as Tymbrianasa or Regio Salamara. It is also impossible to identify it with Komama, Kolbasa, Kremna, because these occur in the same list with it. Adriane occurs in the lists of the fifth century, and must therefore be expected in Hierokles: it is not, however, mentioned by him, but does recur in later lists. There is no possible course, in my judgment, except to identify Adriane with Olbasa. All difficulties then disappear, except the absence of the title Adriane in all early documents. If the name commemorated the emperor Hadrian, it could hardly have been omitted on coins. A similar example occurs in Kilikia: Eirenopolis bears the title Neronias in some ecclesiastical documents, but never on coins. The explanation is probably the same in both cases: some saint or bishop was commemorated, and not the Roman emperor. In this neighborhood, I observe two other examples of the same process: Maximianopolis must have been named after Stephen, and Adada after Elias. These popular names have lasted to the present day as Tefenni and Ilyas or Elyes.

Besides the inscriptions of Schönborn, Duchesne, Collignon (the Latin ones in *Ephem. Epigr.*, iv, 47-50; v, 1359-63) and A. H. S., No. 31, I have to add the following, from the ancient site:

ΑΙΚΙΝΝΙΑΣΤΡΙΞΚΙΑ
ΛΗΞΙΕΡΕΙΑΣΔΙΟΞΚΑΤ
ΛΙΟΥΚΑΙΚΑΤΤΕΤΟΛΙ
ΗΡΑΣ
ΤΟΝΑΝΔΡΙΑΝΤΑΗΒΟ
ΠΑΡΕΑΥΤΗΣ
ΤΗΝΖΗΝΟΣΞΕΙΕΡΕΙΑΝ (sic)
ΦΙΛΗΠΑΤΡΙΞΕΝΘΑΔΕΤΕΙΜΗΣ
ΞΤΗΣΑΤΟΠΤΡΙΞΚΙΛΛΑΝ
ΜΝΗΜΟΣΥΝΗΞΕΝΕ
ΚΕΝ

Αικιννίας Πρισκίλ-
λης ιερείας Διὸς Καπ[ετο-
λίου καὶ Καπετολί[ας
"Ηρας
τὸν ἀνδριάντα ἢ βο-
υλῇ] παρ' ἐαυτῆς
τὴν Ζηνὸς εἰέρειαν
φίλη πατρὶς ἐνθάδε τείμης
στήσατο Πρισκίλλαν
μνημοσύνης ἔνε-
κεν.

D. 16. PALAIAPOLIS is placed by Hierokles between Olbasa and Lysinia. In this situation there are numerous traces of ancient life, but especially at Akche Euren and Ak Euren: probably villages or small towns existed beside both places. The names of both are given in *Not. Episcop.*, III, X, XIII, ὁ Παλαιονπόλεως ἦτοι Ἀλιεροῦ (vv. ll. Ἀλιεροῦ, Ἀλευροῦ). According to the common practice in the later *Notitiae*, when population in a district was gradually changing its centre, the two centres, the old and the new, are mentioned together. It is probable that Palaiapolis is Ak Euren in the open plain; while Alieros, far up the course of a tributary in a glen among the hills beside Akche Euren, became more important in the later time, when such retired and sheltered positions were more suitable to the troubled state of the country. A few coins of the third century after Christ, whose style points to this part of Asia Minor, bear the legend ΠΑΛΕΟΠΟΛΕΙΤΩΝ. As no other city Palaiapolis in the southwest of Asia Minor is known, the coins must be attributed⁷⁸ to the Palaiapolis of the Byzantine Pamphylian lists. It is obvious, from the coins and remains, that the district was affected by the Græco-Roman civilization only at a late period, and that city-organization of the Greek type, athletic games, and coinage begin at about the same time. To judge from the fourth inscription, the population during the second century were still dispersed *κωμηδόν*.

The inscriptions of Palaiapolis are (1) and (2), *Bull. Corr. Hell.*, I, p. 337, at Kemer; (3) copied by me in 1884 at Kemer:

NANACMEN KΛE
OC EN EKΛHA
ΠOΛΛΩNI TΩ A
TP AYTHCMI
AC XAPIN

Νάνας Μεν[ε]κλέ-
ος [Μ]ενεκλή
πολλωνί[ου] τῷ [π]α-
τρ[ι] αὐτῆς μ[νεί-
ας χάριν

(4) At Ak Euren, in a fountain, copied by me in 1886:

First side:

ΕΤΟΥC BPPN
(Tracery)
KAITΩΔHMΩTΩMA
KPOTEΔEITΩN

ἔτους βρ' ρν'.
[Ἀπόλλωνι?]
καὶ τῷ δήμῳ τῷ Μα-
κροπεδειτῶν

⁷⁸ LONGPERIER attributes them to Gagai of Lykia, on the hypothesis that it bore the name Palaia Polis.

(Defaced relief)

ΤΡΩΙΛΟΣ ΩΦΕΛΙΩΝΟΣ
 ΟΣΑΕΙ ΚΑΙ ΤΑΤΕΙΣ Ἀγα-
 ΘΕΙΝΟΥ ΗΓΥΝΗΑΥΤΟΥ
 ΚΑΙ ΤΡΩΙΛΟΣ ΔΙΣ ΚΑΙ Ἀ-
 ΓΑΘΕΪΝΟΣ Ὅσαεὶ τὰ τέ-
 ΚΝΑ ΑΥΤΩΝ ΕΚ ΤΩΝ ΙΔΙ-
 ΩΝ ΚΑΤΑΣΚΕΥΑΣΑΝΤΕΣ

Τρωίλος Ὁφελίωνος
 Ὅσαεὶ καὶ Τατεῖς Ἀγα-
 θεῖνου ἡ γυνὴ αὐτοῦ
 καὶ Τρωίλος δις καὶ Ἀ-
 γαθεῖνος Ὅσαεὶ τὰ τέ-
 κνα αὐτῶν ἐκ τῶν ἰδί-
 ων κατασκευάσαντες

Second side (left):

Relief representing a horseman, to left, with radiated head; the horse lifts the right forefoot; garland beneath; under the garland is the inscription:

ΙΡΥΣΟΚΟ ΗΝΤΑΙΑΝΑ
 ΟΝΗΥΚΟΜΟ ΣΤΕΚΕΛΗΤΩ
 ΗΕΛΙΟΝ ΦΑΕΘΟΝΤΑ ΛΕΛΟΥ
 /// ΝΟΝΩΚΕΑΝΟΙΟ·ΕΙΛΕ
 ΟΝΑΝΘΡΩΠΟΙΣΙΝΟΙΕΝ
 ΘΑΔΕΝΑΙΕΤΑΟΥΣΙΩ
 ΣΕΛΕΥΚΟΣ ΚΙΒΥΡ[ΟΥ]
 ΕΠΟΙΕΙ

Χρυσοκό[μ]ην Παιᾶνα
 ὃν ἡύκομος τέκε Λητώ
 Ἡέλιον φαέθοντα λελου-
 μένον ὠκεάνοιο·εἴλε-
 ον ἀνθρώποισιν οἱ ἐν-
 θάδε ναιετάουσι
 Σέλευκος Κιβύρ[ου]
 ἐποίησε

*Third side (back; concealed in masonry):**(Relief)*

////////// ΒΑΣΙΛΗ
 ////////// ΧΡΥΣΕΟΜΙ
 ////////// ΕΡ ΜΗΝΤΕΚΛΥ
 //// ΝΑΤΑΝΓΕΛΛΟΝΤΑΒ
 ///// ΟCΖΕΥCΦΡΟΝΕ
 ////////// ΤΟΙΘΕΟΙ ////////// ΛΟΙ

βασιλη-
 χρυσεομι-
 τρην]· Ἑρμῆν τε κλυ-
 τόπωλο]ν ἀπανγέλλοντα β[ρο-
 τοῖσιν] ὅσσα Ζεὺς φρονέ[ει
 τε καὶ ἀθάνα]τοι θεοὶ [ἅλ]λοι.

Fourth side (right; concealed in masonry).

At the mosque in Ak Euren there are also two defaced inscriptions, one beginning ΑΓΑΘΗ ΤΥΧΗ.

The double date 102 and 150 is remarkable: if the second is according to the Kibyric era, A. D. 25, the first must be an era beginning A. D. 73, which is probably the time when Pamphylia was incorporated by Vespasian in the new province Lycia-Pamphylia. The inscription then belongs to A. D. 175. The Μακρὸν Πεδίον is the narrow plain along the Lysis below Olbasa: the district was, from its position, affected only at a comparatively late period by the Græco-

Roman civilization. The population collected in a city-centre and coined money in the third century. The word 'Οσαεί is usually genitive of 'Οσαείς, but, as Agathinos is obviously son of Troilos and Tateis, it would seem that here 'Οσαεί is an indeclinable name, and that the father was called Troilos Osaei, and the younger son Agatheinos Osaei.⁷⁹

(5) Near Akche Euren, on the site to which I have given the name Alieros, I copied the following on a fragment of the architrave of a heroön :

MENNEACTPOKONΔΟΥΚΑΙΜΑ■

ANECTHCANEAYT■

Μεννέας Τροκόνδου καὶ Μα[μας? τοῦ δεινὸς ἢ γυνὴ αὐτοῦ]
ἀνέστησαν ἐαυτ[οῖς μνήμης χάριν.

D. 17. LYSINIA.—The situation of Lysinia is determined with an accuracy unusual among the towns of Kabalis by several conditions: first, it must be on (or close to) the river Lysis; secondly, it must be near, but not actually on, the march of Manlius (see Ε); thirdly, it was an independent city coining money, and cannot therefore be near the mouth of the Lysis, as that district was not independent but merely part of the territory of Sagalassos throughout the Roman period. These conditions point to the site on the Lysis, with a bridge showing clear traces of Roman work over the river, in the country immediately above the Sagalassian territory Regio Salamara. One inscription only of Lysinia is known to me: I copied it at Elmajik ("Little Apple") in 1886:

ΙΟΥΛΙΑΝΔΟ
ΜΝΑΝCΕΒΑC
ΤΗΝΜΗΤΕΡΑ
ΚΑCΤΡΩΝ
ΗΒΟΥΛΗΚΑΙ
ΟΔΗΜΟC

Ἰουλίαν Δό-
μναν Σεβασ-
τήν, μητέρα
κάστρων,
ἡ βουλὴ καὶ
ὁ δῆμος.

The inscription shows that Lysinia was an organized city. From the situation of Elmajik the inscription might have come from Palaiapolis, but the natives declared that all remains in their village came from the ruins on the Lysis.

W. M. RAMSAY.

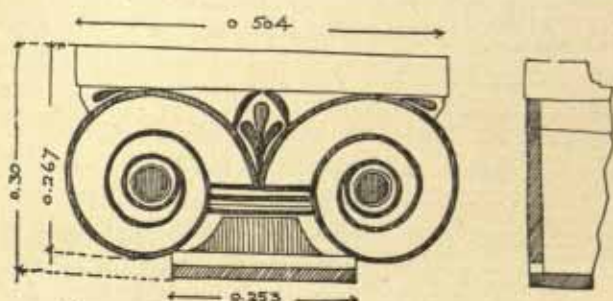
University of Aberdeen, Old Aberdeen, Scotland.

[To be concluded in next number.]

⁷⁹ Cp. Alexandros Tieion, Men Tiamou, *Men Pharnakou, etc.: see *Journal Hellenic Studies*, 1882.

ARCHAIC IONIC CAPITALS FOUND ON THE AKROPOLIS.

Of the many architectural remains found upon the Akropolis during the recent excavations by the Greek Archæological Society, none are of more importance from an historical point of view than the fragments of Doric and Ionic capitals that have come to light. The depth at which they were found, the nature of the earth in which they lay, and all the circumstances of their discovery make it almost certain that the buildings or monuments to which they belonged were destroyed at the



Painted Capital lately found on the Akropolis.

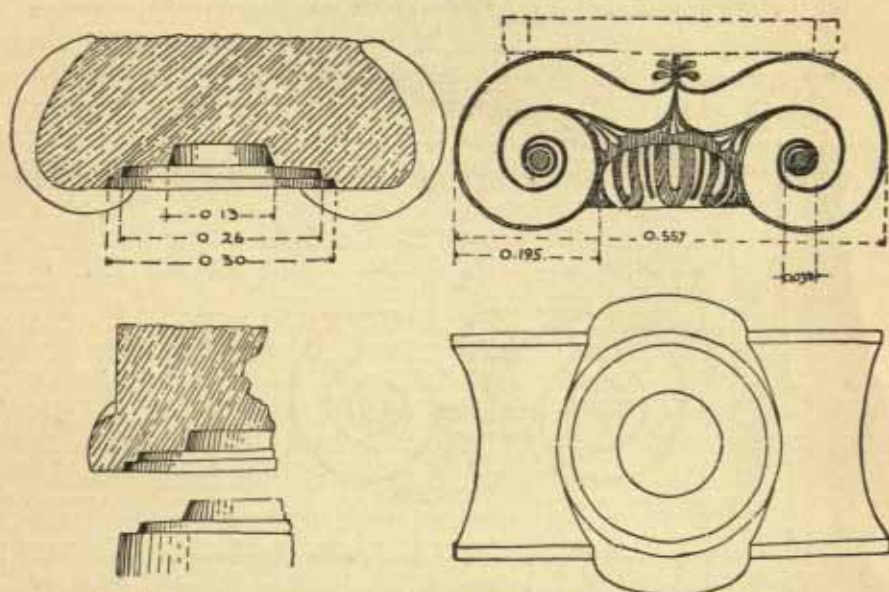
FIG. 2.

time of the Persian invasion. Their forms and other characteristics, however, indicate that their origin was of a much earlier date.

What makes them especially valuable is, that they supply material for filling up gaps in the history of the two Grecian orders, just as the lately-found archaic statues connect the sculpture of the best Greek period with that of the rude and barbaric time that preceded it. The fragments of the Doric order serve, indeed, to confirm ideas already sufficiently well established, rather than to suggest new views. The types of the Ionic order now unearthed are, on the other hand, both new and important. Archaic forms of capitals more or less resembling certain well-known Assyrian ornaments are not infrequently represented upon ancient pottery, and these have seemed to confirm the theory of the Oriental origin of the Ionic order, first suggested by the Assyrian

sculptures. The capital discovered in 1882 upon Mt. Chigri in the Troad by Mr. J. T. Clarke and already described by him in this Journal (vol. II, pp. 1-20) seemed to confirm this view. No such example, however, had been found upon Greek soil until the present discoveries.

By a comparison of the Chigri capital¹ with the later examples, such as those of the temple of Nike Apteros, or of the internal columns of the Propylaia, the following marked differences are noticed. In the earlier

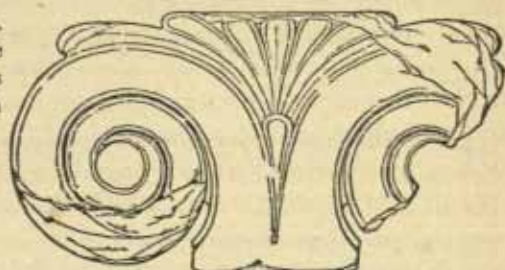


Painted Capital found on the Acropolis.

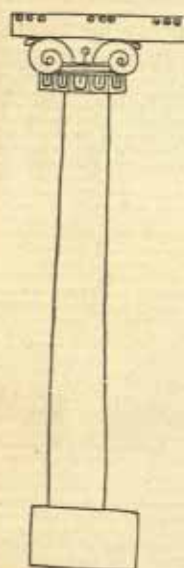
FIG. 3.

capital the volutes spring vertically from the shaft of the column: those of the later period are connected by an undulating horizontal band.

¹The cut here given, from Mr. Clarke's article on *A proto-Ionic Capital*, shows the block in its present condition, as found on Mt. Chigri.



The palmette ornament, which springs from the centre of the Chigri capital and forms one of its most important features, taking the place of an abacus, entirely disappears in the later examples, in which the abacus takes the form of a separate block. The juncture of the capital with the column in the later examples is marked by a double moulding, the echinus and bead beneath it, entirely wanting in the older form. In the general proportions the difference is no less strongly marked. The great projection of the volutes of the Chigri capital and the consequent



From a vase in the
Acropolis Museum.
FIG. 4.

difference between its width and its depth from front to back are especially noticeable. In the Chigri capital this ratio is more than three to one: in the common type it is about three to two.

In each of these particulars the three recently-found Ionic capitals seem to illustrate the intermediate steps in the development of the later from the earlier form. The capital shown in *figure 2* is probably the earliest of these. It is of marble, and the faces are reduced to a smooth surface, upon which the ornament is painted. The volutes resemble those from Chigri, the eye being large, and the number of turns in the spiral identical. The most noticeable feature, however, is the vertical springing of the volutes. It is, I believe, the only instance of this kind that has been found in Greece proper, though there are many representations of it upon vases, and some examples of pilaster capitals illustrate the same principle. The abacus here forms a separate feature: it is very wide, being equal in width to the whole projection of the volutes. The introduction of the abacus cuts off the upper part of the anthemion, which is so conspicuous a feature of the Chigri capital, and reduces it to a small ornament filling-in the triangular space between the volutes. The ends of the two outermost leaves, however, are retained, and appear in the extreme upper corners below the abacus. The horizontal bands connecting the volutes, at about the height of the eyes, seem to be the first germ of the echinus.

The great breadth of the abacus leads one to believe that this capital was part of the pedestal for a statue or a votive offering, rather than

part of a building—an opinion which is strengthened by the existence of a large dowel-hole in the upper surface.

Of the capital shown in *figure 3* there are not sufficient remains for a complete restoration. The abacus is wanting. This capital, like the first, is of marble reduced to a smooth surface and painted. In this case, the development is carried further. The volutes, instead of starting vertically from the shaft, unite at the centre of the capital, turning upwards in a curve of contrary flexure. At their point of junction, the spaces above and below are filled by the last remnants of the central anthemion. The ends of the two leaves which appeared, in the former case, in the extreme outer corners are here wanting, but two small three-leaved anthemias are introduced in the inner corners of the volutes. These last continue to appear in nearly all the capitals of the best period. The eye of the volute is much smaller in proportion to the size of the capital than in the previous examples. But the special point of interest in this capital is the existence of a projecting echinus. It seems to have been introduced from purely constructive considerations. The shaft of the column, as appears from the *figure*, was dowelled into the bed of the capital, and, as the diameter of the column was equal to the width of the capital from front to back, it was necessary, where the faces were tangent to the circumference, to leave a certain amount of material projecting in front and behind. This projecting block was rounded-off so as to form a sort of boss, which was painted with a rude egg-and-dart pattern.

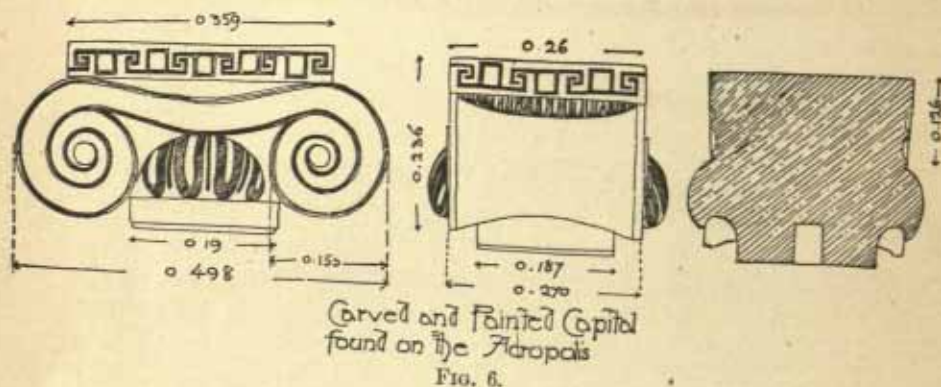


From a vase in the
Polytechnic Museum—
FIG. 5.

On a vase in the Akropolis Museum there is a painting of an Ionic capital which appears to be intermediate between this and that represented in *figure 2*: it is shown in *figure 4*. The ornament of the echinus, which in this case seems to continue around the whole circumference, resembles that upon the projections of *figure 3*, while the volutes, starting vertically, closely resemble those of *figure 2*. This capital also has the last vestiges of an anthemion, now reduced to the ends of two leaves in the outer corners and a single stalk in the centre. *Figure 5* shows a capital copied from a vase in the Polytechnic Museum at Athens. It exhibits an interesting combination of the two principles of starting the volutes vertically and of uniting them by a horizontal curve. Although these vases are of much later dates than the Persian wars, this

does not prove that the date to which the capitals have been assigned is an erroneous one. The traditions of the potteries were handed down from one generation of artisans to another, often preserving, in their representations, forms which had long been obsolete in practice.

The capital shown in *figure 6* is much better preserved than the two already mentioned, and is of much better workmanship. Moreover, all the ornamentation, except the fret on the abacus and the painted ornament of the echinus, is carved in relief. The volutes are connected by a continuous band, and the central anthemion has entirely disappeared. The formation of the echinus is the most interesting point. In appearance, it is precisely like that of the second capital described above, but on closer examination it is evident that it has been retained only as an



ornamental feature, the constructional necessity for it having been obviated by reducing the diameter of the column. Moreover, the echinus is undercut in the shape of a "beak" moulding, and the capital is merely superposed upon the column, as is shown in the section. On the flank of the capital, between the straight line of the abacus and the curve of the baluster, there is a very delicate egg-and-dart moulding—a feature which sometimes appears in later examples. This capital, except in the form of the echinus, does not differ essentially from the commonly received type.

These changes seem to have followed naturally one from the other. At first, the volutes sprang vertically from the shaft at its juncture with the capital. Later, horizontal bands were added, apparently, from aesthetic considerations. The introduction of the abacus as a separate feature was the next step. This cut off the anthemion, which was reduced in

size and importance until it disappeared and its place was taken by the continuous band connecting the volutes. This accounts for the characteristic depression of the band in the middle which distinguishes the Greek type from the Roman. The junction of the capital and column seems to have been a subject of experiment resulting, as we have seen, in the introduction of a projecting moulding. The change from the "beak" moulding of the capital, shown in *figure 6*, to the echinus of the fully-developed capital of the Propylaia or the temple on the Ilissos was simply the substitution of one architectural moulding for another. The egg-and-dart ornament is itself characteristic of the ovolo, and would naturally suggest this change, which the examples of the Doric echinus would make doubly easy. The irregular and abnormal projection of the Ionic echinus seems to be thus, at last, fully accounted for.

S. B. P. TROWBRIDGE.

Athens, December 12, 1887.

AN ENGRAVED BRONZE BULL AT METAPONTO.

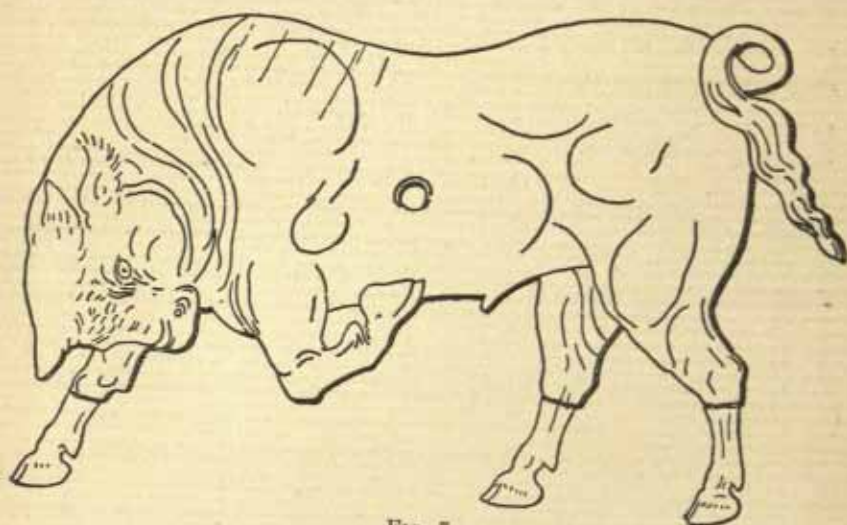


FIG. 7.

In the course of an extended archaeological tour in Magna Græcia, undertaken last winter in the interest of the Archæological Institute of America, it was twice my fortune to visit the site of ancient Metapontion; and, though haunted by Mommsen's allusion to its fever-stricken plain as a locality where the traveller does not willingly tarry overnight, to remain there a couple of days on each occasion. I thus had the opportunity, besides giving an adequate examination to the noteworthy ruins and the general topography of a place teeming with historical memories, to overhaul with more than ordinary thoroughness the contents of its little museum. My efforts were principally directed to a successful search for fragments of constructive sculptural decoration from the ruins of a neighboring Doric temple, a structure belonging to a date slightly later than the larger *Tavola dei Palladini*, but placed among the first monuments of the stiff archaic style (600-550 B. C.): it has been recently recognized, in the light of an inscription found on the site, as a sanctuary of Lykeian Apollon, but local legend, identifying its shattered and scattered columns with the broken pillars of the house of the Philistines destroyed by the Hebrew sun-hero, has

given the name *Chiesa di Sansone*. I hope to give, before long, an account of the fragments of sculpture I was able to gather, examine, and photograph: unusual importance attaches to them as being the first of their description found on Italic soil. It was only incidentally, as it were, that I was led to make a drawing of an object of a very different character, but to which some interest accrues from the fact that it furnishes, perhaps, the unique example of a new and striking ramification of the vital body of Greek art.

The piece reproduced on a reduced scale of 3 : 4 at the head of this article had, it would seem, attracted the notice of a more or less trained eye before my visit to the little complex of station-buildings which, with a tavern grandiloquently entitled *Albergo Pitagora*, constitute the Metaponto of to-day.¹ Bædeker's *Southern Italy* (German edition of 1883, p. 214) gives the following description of the "Museum" and its contents:

"The objects discovered in the recent excavations are temporarily placed on view in the red house behind the station. They include a dedicatory inscription to Apollon Lykeios, which first determined the purpose of the temple; a fragment of a metope, and polychrome terracotta incrustations and constructive members from the same temple; a boar cut out of sheet bronze and of the archaic style," etc., etc.

The last item, it will not be superfluous to explain, refers to the subject of the present article: there is no other piece in the Museum that could by any possibility lend itself to being taken for "a boar cut out of sheet bronze." The description, indeed, applies only with the qualifications that the animal represented is not a boar, but a bull, that the metal is not sheet bronze, but bronze plate of considerable thickness (3 mm.), and that the technical method of production was not cutting, but engraving helped out by filing. We shall also see that the style of the work is not in the least archaic.

The technique of the specimen is so peculiar that it deserves to be signalled, if only as a rarity. I do not bear in mind any article of

¹ The point is the junction-station of three lines of railroad: it is passed two or three times a day by trains bound from Naples to Brindisi, from Naples to Reggio, and vice-versa, and also by those that skirt the Tarentine Gulf between Taranto and Cape Spartivento. The cultivators of the vast and fertile plain of Metaponto, that stretches prairie-like away from the eye, dwell on the eminences by which it is bordered, if mayhap they escape its malignant fevers; a few railroad functionaries sleep under the precarious but essential protection of a grove of eucalyptus trees.

Greek manufacture, at least in the way of art-work, that exemplifies the application of a *découpé* process to an engraved design. Nevertheless, I shall not lay stress on my impression that the piece is unique of its kind. On the contrary, it would be but natural that its publication should lead to the registering of a little *Corpus* of congeners, very possibly scattered in various collections of antiques. Again, we do not know what the ground may bring forth: only a few years ago, the practice and art of decorating bronze hand-mirrors with engraved figure-designs was still supposed to have been confined to Etruria. To-day, the number of such mirrors found in Greece itself has become sufficient to constitute a distinct class. It is with this class of antiques that the specimen of *découpé* engraving before us most closely affiliates. It would be absurd to emphasize the *découpé* feature by classing it, *e. g.*, with the perforated terracotta reliefs of Melos, the like of which seem to have been in extensive use as vase-painters' models. The superficial analogy would not hold good, any more than the concomitant suggestion as to the use and purpose of the metal specimen. Such a suggestion, perhaps, and at the first blush, would find an apparent support in the style of the design itself, which certainly does recall the animals we have seen on certain red-figured vases. But the method of production, in this case, entailed altogether too much expense, besides failing to produce results suitable for the purpose that has been named. The little bull is to all intents and purposes an engraving, pure and simple. It is designed after an art and method of inline engraving that is in every respect identical with that employed on the mirrors, whether Greek or Etruscan; just as this, in its turn, is in no wise different from that of the Græco-Roman work on the famous cista of Praeneste, or, in fact, almost any known antique engraver's work on a flat metallic surface. Anyone who has had occasion to superintend draughtsmen in the reproduction of antique linear designs (those on red-figured Greek vases, for example) knows how difficult it is to wean the contemporary artist from his proclivity to what may be called the method of symbolic shading; whereas systematic alternation in the thickness of the line, together with all effects dependent on this studied alternation, was not in the manner of ancient art. The modern manner of light-and-heavy-line work, in unshaded drawings, owes its origin to the use of the pen. The pen, in antiquity, had not come into use for drawing; and antique draughtsmanship employs only even lines. Had the Greeks or their Italian disciples invented printer's ink en-

graving, its development would assuredly have followed the linear style exemplified in such work as this of our Metapontine bull. Its novelty and rarity, as a specimen of Greek art, is all in the curious process of the sawing or filing out, from the engraved plate, the outline of the figure. All that was required of the filer-out, who may safely be presumed not to have been identical with the engraver himself, was to follow carefully the outline already drawn for him by the engraver. In the present instance, he has done this carefully and exactly, in so far as no trace of the engraved outline remains, at least on the outer circumference, as an evidence of inaccuracy. The ring formed by the flourish of the animal's tail is also deftly sawn out. The hole in its side, on the other hand, made to receive the round nail used in fastening the image to its presumably wooden background, is a size smaller than the circle marked out for it by the engraver; but this may be due to the necessity of conforming to a smaller-sized nail. Where the animal's raised left fore-leg and foot form an angle of which the outline of the breast just above is the hypotenuse, the workman, somehow, forgot to remove the irregular fragment of background which these lines enclose. The neglect works less disadvantage to a drawing than it does to the bronze original, where it is an annoying and confusing defect. Elsewhere, the alternately careful and careless hand of the subordinate artisan is responsible for the ruthless excision of an important detail of the bull's anatomy.

Although this whole process of cutting-out is a secondary circumstance, as regards the classifying of the piece, it could not, nevertheless, be entirely without influence on the more artistic part of the process of creation, in the art of a people so keenly alive as were the Greeks to the æsthetic requirement of constructive propriety; the peculiarity of the technique excluded background and accessories, and required avoidance of whatever might tend to increase fragility; hence it compelled a considerable amount of attention to the effect of silhouette, and was little suited to the delineation of grouped or correlated figures of any sort. The curious blunder made in the handbook quoted above finds its partial explanation in the insufficient observance, by the ancient artist, of these requirements. So, likewise, through excessive fragility, the little bronze has not escaped the usual ἀκρωτηριασμός of animal-sculptures in stone and marble.² Add to the apparent shortness

² Compare, for instance, the similar loss of the legs in the animal-sculptures in the round unearthed at Olympia, including the "Bull of Regilla."

of the legs, thus brought about, the indistinctness of the silhouette at the forward end of the plate, and the accidental but undeniable swinishness of the curled tail—and "Bædeker's" queer misapprehension becomes intelligible. If the reader will for a moment fancy the incised lines about the head absent, in such fashion that only a silhouette remains to judge by, he will see how the round snout of a bull was mistaken for the fat jowl of a well-fed hog, and the space between the bull's mutilated fore-leg and his lowered horn for the same hog's open mouth. This original interpretation, to be sure, put the sufficiently distinct eye so much out of kilter as to induce a naïve resort to the saving archæological epithet "archaic."

It is clear that the breakage occurred in consequence of an endeavor to wrench out the dedicatory nail by leverage with the bronze plate itself, and that the strain proved strong enough to snap the feeble fulcrum extremities of the triune lever. In spite of corrosion, the broken edge of the mutilated members is as clearly recognizable, as such, as are the regular strokes of a file on the greater part of the irregular circumference. Further and corroborative traces of violent removal may be observed in the slanting striation of the chine region, on the forward half of the animal's body, where the metal has sustained the scraping action of some tool.

The supposition that we really have to do with a dedicatory offering to Apollon Lykeios hardly admits of a doubt. The custom of setting, hanging, or nailing up within a sacred enclosure, for the delectation of a god supposed to abide there, any object of a character to form a suitable gift from a mortal to an immortal being, was, as is well known, so common as to have given rise, perhaps, to the majority of the noblest works of painting and statuary and industrial art known to antiquity. In the present instance, the dedicatory intention, which the finding-place alone makes sufficiently probable, is expressed not only in the external contrivance for the act of fastening up (*ἀνατίθημι*, *ἀνάθημα*) that constituted the dedication, but also and chiefly in a style of manufacture which reduced the artist to an extreme of unadorned simplicity, in accordance with the natural wants of his customers.

A well-fed, muscular, short-horned bull, of thickset proportions, presents itself to the spectator in profile, as the *découpé* style in which it is wrought demands (*fig. 7*). Its attitude is the familiar one, with this animal, of menace or attack. Passing across the plane of vision from right to left, at a walking gait, it has suddenly stopped, perhaps at sight

of an adversary, to indulge in an exhibition of its bovine rage, after the fashion of bulls. Its hind-legs are still braced in a walking posture, the off or right foot being advanced, while the near one has not ceased to bear the larger portion of the weight of the quarters. The right fore-leg, which is extended as far forward as its length allows, offers an elastic support, in spite of its sturdy proportions, to the whole ponderous mass of the creature's fore-quarters, shoulders, neck, and head. The animal ominously lowers its head to a plane almost parallel with the ground it treads. It is not outlined in pure profile, but appears so poised as to give an almost full view of a broad forehead adorned with two short but heavy horns, as well as of a bristling ear, a distended nostril, and a rolling eye, that tell of gathering rage. No doubt the artist consciously preferred this pose of the head, as affording broader scope to his talent and a certain relief from the monotony of dry profile; but it has its naturalistic justification in the vigorous motion that accounted, as we have seen, for the preservation of the left fore-leg. With this foot the enraged animal is throwing dirt in truly formidable fashion. Violent exertion of this sort usually draws into involuntary action the portions of the muscular structure not directly engaged: it is the less to be wondered at, if a dangerous ripple is seen to agitate the silky tassel of the beast's sharply curled tail. In the smallest dimensions (length, over all, 141 mm.; height, exclusive of restoration, 65 mm.) the old master-engraver has succeeded in placing before the eye the perfect miniature image of the live βούς θούριος. It is the live animal that paws the ground before us, individualized with surest stroke, even to the subtle play of muscle and fat, skin and hair, even to the just visible lash of an unseen eye. Thus, the same animal-action is put before the reader's eye by the happy turn of Vergilian verse. How is it the pastoral poet describes the performances of the bull training for the fight? "And he tries himself, and studies to throw his rage into his horns by rushing against some tree-trunk, or he will worry the winds with empty thrust, and scatter sand in prelude of battle."³ In Vergil also do we find detailed the several points of the ideal of bovinity to which our artist has sedulously conformed: broad forehead, heavy neck, low-hanging dewlap, long flank, large extremities, including a big foot, horns that curve inward, bristled ears, and a tail the tip of which touches the ground (*Georgics*, III, vv. 52-59). To

³ VERGIL, *Georgics*, III, vv. 232-34.

make up for any deficiency in the last particular of Vergil's enumeration of the essential qualities of a thoroughbred animal—for its unrolled tail would hardly touch its tracks as he prescribes—our engraved one possesses a mark left out by the poet, but on which modern cattle-fanciers lay great stress, viz., shortness of horn. That this quality found admirers of old as well, is shown by Ovid (*Metamorph.*, II, 854-56), whose description of the father of the gods as he presented himself to Europa and her companions may be applied, without alteration, to the ideal of our engraver:

*Colla toris extant; armis palearia pendent;
Cornua parva quidem, sed quae contendere possis
Facta manu, puraque magis perlucida gemma.*

As a work of art, then, it is clear that the intention of our engraving is the representation of the finest type of animal. And this intention is the more obvious in that we can see how well-fed was the model chosen; contrary to Vergil's plan, whose champion bull trains himself for the fight by rough living, the formative artist seems to have selected the best-fed and sleekest model he could find. The creature's prime condition does not however exclude the utmost development of muscular strength. Its neck, as Ovid has it, "fairly stands out with muscles."

The selection, for the representation of a bellicose animal, of the moment which shows all its forceful energies concentrated in the typical attitude of attack, needs no explanation. But very recently, the master hand of an Isidore Bonheur has treated the same subject with eminent success.⁴ And it is interesting to note that the modern artist's rendering is present to the writer's memory in the form of a mere enlarged copy, as it were, of our little *βοὺς θούπιος*. This serves, in a manner, to define the age and artistic character of the unconscious prototype. Of archaism, as was premised above, there is not a trace. Force and freedom are here united in such degree that one does not incline to date either as early as the Parthenon frieze, with its processional, unindividualized sacrificial cattle, or much later than the balustrade of the temple of Nike, with the highly wrought movement of its mutilated prancing bull. This is, in figures, to assign the piece, chronologically,

⁴ His butting bull in cast iron was one of the attractions of the exhibit of metal-lurgy in the Paris Exhibition of 1878. Compare Kemey's bronze panther, "The Still Hunt," in Central Park, New York.

to the vicinity of 400 B. C., and we find ourselves curiously confronted by a corroborative series of coins struck at this very period hardly fifty miles from the *Chiesa di Sansone*, in the ruins of which the subject of this article was unearthed. I refer to the silver coinage of Thourioi, which has long attracted the attention of numismatists by reason of its extraordinary beauty. The coins of Thourioi have for their characteristic device the figure of a butting bull, the perfect counterpart of this engraved one from Metapontion, both as regards attitude and style. It differs only in facing to the right instead of to the left. This difference, as the die-cutter works, only points to more absolute identity. The agreement is as great as we are accustomed to look for, in ancient art, between a copy and its original, or between two copies of the same original. The bull's head presents itself, perhaps, in more perfect profile, and the pawing foot is raised a fraction less. Ancient copyists, as a rule, were neither slavish nor minute. Thourioi will be remembered as a predominantly Athenian colony planted on the deserted territory of Sybaris in 443 B. C., when Athens herself was in the heyday of her Perikleian prime. Its foundations had been laid by such men as the historian Herodotos and the orator Lysias; its legislation was the best ever enjoyed by a Greek community. The shores of the Tarentine Gulf form three sides of a square which opens toward Greece. Tarentum occupied its north, Thourioi its west corner. An almost straight shore-line extends only eighty miles between the two cities. Metapontion was the only important city between the two, and had become a place of merely agricultural importance. At the beginning of the fourth century, Thourioi was the coming rival of Tarentum. It was twice as far from Thourioi to Metapontion as it was from Metapontion to Tarentum, but a man might still walk the distance of fifty-four miles (90 km.) in a day. The intimate commercial relations of Metapontion with Thourioi would naturally engender considerable community even in matters pertaining to religion and worship. It would not be surprising had the colonists paid their respects to the tutelary god of the older city that was their friendly neighbor by dedicating the heraldic symbol of their city in the venerable temple of Apollon Lykeios, which was that city's chiefest shrine. Or, since the modest dimensions of the gift exclude the hypothesis of its being a public dedication, it could be assumed that some individual citizen of Thourioi as naturally fell upon the idea of commemorating his devotion with a miniature copy of his civic emblem. If such an ex-

planation commends itself to our view, we shall incline to regard the engraved bull not only as the work of some Thourian artist, but also as being, presumptively, a replica from some larger work extant at Thourioi itself—the same which supplied the model for the designers of its public mint. Certainly no direct connection with the cult of Apollon Lykeios can be conceived as having suggested so peculiar a subject. And we cannot ignore the recurrence of the same in so striking coincidence of time and space.

A more cautious reasoning will, however, sufficiently account for the coincidence just observed on a broader basis of local associations. There is no more pastoral district to be found in the pastoral peninsula of Italy than the last southern offshoot in which the chain of the Apennines extends its extremity to the Sicilian Strait. The wheat lands of the Gulf stop with the plain of Metapontion; the vine, with the olive, thrives along a narrow strip of the coast to which it gave the name of Oinotria ("Vineland"); the whole interior is a mountain fastness of forest and pasture lands⁵ that finds its orographic culmination in the impenetrable ranges of Magna Sila. Here, in antiquity as to-day, was the *Canton de Vaud* of Italy. If Vergil, that refined cattle-connoisseur, wishes to give his cattle pictures the touch of local color that makes them live, it is in the fastness of the Sila that his bucolic panorama unfolds itself, and this indifferently, whether his splendid description of the battle of two mountain bulls is a touch of his didactic discourse concerning cattle (*Georgics*, III, vv. 221–23);

*Pascitur in magna Sila formosa juvenca ;
Illi (sc. tauri) alternantes multa vi prœlia miscent
Vulneribus crebris ; lavit ater corpora sanguis,
Versaque in obnixos urgentur cornua vasto
Cum gemitu,*

or whether it serves, in the guise of simile, to heighten the very climax of his epic poem, the story of the single combat between Aeneas and Turnus (*Aeneid*, XII, vv. 715–22):

*Ac velut ingenti Sila
Cum duo conversis inimica in prœlia tauri*

⁵STRABON (*Geogr.*, VI. 1. 9) reports that the pine pitch manufactured in the forest of the Sila, which extended uninterrupted over a length of 700 stadia (70 miles) north and south, was a first-grade article of commerce. The pastures extend over a much larger area. The timber lands are now much reduced in comparison with Strabon's figures.

*Frontibus incurrunt; pavidì cessere magistri;
 Stat pecus omne metu mutum, mussantque juvencae,
 Quis nemori imperitet, quem tota armenta sequantur;
 Illi inter sese multa vi volnera miscent,
 Cornuaque obnixi infigunt, et sanguine largo
 Colla armosque lavant; gemitu nemus omne renugit.*

Of the Idyls of Theokritos, again, the one which deals most particularly with the doings of the rude neatherds and their four-footed charges, has its scene in the verdant uplands of Kroton, which are no other than the same pastures of Magna Sila. The Theokritian touches⁶ concerning the strong cattle-herder Aigon, who is equally ready to drag his strongest steer down the mountain by the hoof or to eat eighty porridges, are essentially Swiss. It was the application of Greek athletic training to such native material that produced such champions as the Krotonians Milon and Phayllos. Nor is it without significance if the name which afterwards, and aptly enough, was gradually extended over the whole Apennine peninsula, was first applied to these very Calabrian highlands, by contrast, no doubt, with the corn land across the strait. For the eponymous king Italos—the identity of whose fictitious name with the Italo-Greek provincialism *ἰταλός* for *ταῦρος*, "bull," was noted by the Greek antiquarians—is distinctly said to have reigned over the Siculi of the mainland opposite Sicily.⁷ In fact, the bull on the coins of Thourioi is more than a punning allusion to the name of the town; in adopting the emblem, Thourioi but gave proper recognition to the chief source of her wealth, following in this a widespread custom of early numismatic ages,⁸ exemplified, for instance, in the early coinage of Poseidonia-Paiston, or still better in the device of a bull regardant which appears on the incuse silver pieces of Sybaris, and which suggested the Thourian modernization. This very modernization is in the line to be looked for in a cattle-raising community. The bull of Sybaris, as he appears on the incuse coins, which are anterior to the year 500 B. C., is manifestly of the large-limbed, long-horned stock indigenous to Italy—the stock to which belong the large gray oxen that

⁶ *Idyl* iv, vv. 33–36.

⁷ THOUKYDIDES, VI. 2. The word *ἰταλός* was of Italic origin, akin to Latin *vitulus*, "calf"; Oscan coins are inscribed *Vitellu* = Italia. See CURTIUS, *Grundzüge der gr. Etymologie*, s. v. *ἰταλός*.

⁸ Βούτ, "ox," was used simply for "money," as in AISC., *Agamemnon*, v. 36 (compare Lat. *pecunia*), or for the unit of currency (so also γλαῦξ, χελώνη, and other names of animals given in POLYDEUKES' *Onomastikon*, ix. 73–76: compare our "eagle").

to this day roam the Roman Campagna, and the draught animals the writer has often seen wade into the sea, in the harbor of Kroton, so as to transfer directly to a vessel the loads of sulphur they had hauled from the mountains to the shore. The Hellenic colonists engaged on the same process of supplanting this indigenous Italian breed with an improved stock which is being undertaken by progressive Calabrian land-owners in our own age and day with a variety of Swiss and Holstein-Frisian breeds. Even thus, the American long-horns have been relegated to the cattle ranges of Texas and Spanish America, before the advance of the Jerseys and Ayrshires from the mother country.

In the light of these considerations, it is not necessary to assume that the striking coincidence observed between the engraving and the coin is based on direct imitation. The common original was simply the natural animal, not indeed the prehistoric Italian ox, the *Βιταλός* of etymological fame, but the Greek thoroughbred of more recent introduction. No doubt the observation of both artists had been schooled on works that presented the same subject in larger dimensions; else we could hardly look for the science displayed by both. There would be no lack of examples without going far from home. The sculptors of Western Greece began early to exercise their skill on animal subjects; not to dwell on the semi-mythical bull of Phalaris of Akragas, by Perilaos, the statue of Europa on the bull, by Pythagoras of Rhegion, was enumerated among his most famous works.

The character of the god in the ruins of whose shrine our engraved bull was found may best suggest the probable circumstances of the dedication. Apollon is the god of healing. The cure of disease was frequently, if not always, the occasion of honoring him by the dedication of an effigy of the healed part, or perhaps of the healed person. We have seen above that the condition of the animal whose portrait in this particular case formed the votive image is superlatively good, as if in emphasis of its breed and health. The offering may well have been that of some small farmer, unable to pay the cost of a more expensive gift, in return for the recovery of a pet animal, or that of one of the wealthiest cattle-kings (if there were such) of the Oinotrian peninsula, in return for a whole herd saved from the cattle plague by the implored divine interposition. In either case, the dedicator was cheaply acquitted, and that on a technicality, of his vow to reward the god by the dedication of "a bronze bull."

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ALFRED EMERSON.

NOTES ON ORIENTAL ANTIQUITIES.

VII. TWO STONE TABLETS WITH HIEROGLYPHIC BABYLONIAN WRITING.

[PLATES IV, V.]

Among a number of interesting objects collected in Babylonia by Dr. A. Blau (formerly in the Turkish medical service), and of which he very kindly allowed me to take wax impressions or photographs, were two small, thin specimens of engraved jade-like green stone, perhaps a hard variety of serpentine. They have already been published by me, with wood-cuts, in the *Proceedings of the American Oriental Society* (October, 1885), but their great importance, as giving probably the oldest examples yet known of the Babylonian writing, makes it proper to reproduce them by a photographic process. They are said to have been found near Warka, and they have never suffered from wear, although, owing, perhaps, to the lamination of the stone, a small bit has flaked off from the inscribed side of the larger one: otherwise, the marks of the primitive tooling are perfectly distinct. I have not measurements of these tablets, but they are represented very nearly of the natural size.

The shape of the one first described approaches an oval divided a little below its larger diameter. One side, which I may call the obverse (PL. IV, No. 1), has in the middle a standing beardless figure, with both hands uplifted. He has no headdress or sign of hair, being as bald as the heads from Telloh: the eye is round, and the nose very sharp. He wears a single garment, a skirt reaching nearly to the ankles, apparently transparent, through which the figure is seen: it is covered with cross-hatched lines dividing it into small squares, and is held by a band about the waist, and folded about the body to show the lapping edge, or possibly the cord of the girdle. In front of him are two figures with similar head and profile, but naked, each kneeling on one knee, and holding in the hands what appears as if it might be a large pestle with which they may be grinding corn. Behind him is yet another similar figure, also engaged in the same work, but sitting on a stool (compare figures in a similar position on Babylonian cylinders, *c. g.*, A. J. A., II, p. 46).

On the right-hand side are inscribed several characters. The reverse side (PL. IV, No. 2) presents two human figures. The larger of them stands facing towards the right. He is dressed in a skirt like the principal figure on the obverse, but his features and head-dress are entirely different. He has a prominent hooked nose, a beard which does not at all conceal the features, a band or turban, about the head, which seems to leave the top of the head either bare or covered with a close cap, and the hair hanging in a heavy mass behind. He holds in his hands a stout sceptre-like rod, perhaps phallic. Facing him is a smaller figure, very similar in feature and dress, but with both hands lifted as if in an attitude of respect. The skirt falls scarcely below the knees, lacks the fold or cord at the side, and the delicate lines which indicated the texture in the other case. The scene would appear to represent a worshipper before a deity. The rest of this side is taken up with writing. On the obverse, the surface of the stone is roughly hollowed out around the figures, instead of their being in true relief; but on the reverse and in the other tablet the technique is better.

The other tablet, also flat and thin, is somewhat coffin-shaped. On the obverse (PL. V, No. 1) is seen, in the upper register, a man carrying what is perhaps a ram, though the legs are those of an ox, and it appears to have antlers in place of horns. The man's features, beard, and head-dress make him the exact counterpart of the principal figure on the reverse of the larger tablet, although his skirt is shorter and does not show the limbs under it. In the lower register appears a figure on one knee, almost the exact counterpart of those on the obverse of the larger tablet, but without the prominent nose. The reverse (PL. V, No. 2) is wholly covered with an inscription.

The most remarkable point about the human figures represented on these tablets is, that they seem to indicate two very different races. The superior race has a Jewish nose, and is bearded: the inferior race, including the four in the attitude of servants and one standing figure, have no sign of hair or beard or dress, and have a sharp nose, or a face approaching the ape-like in expression. They are probably not women, but resemble the beardless naked men on the Vulture Column of Tel-loh (De Sarzec, *Découvertes en Chaldée*, pl. III), which are the earliest known specimens of Chaldean art. The deity (?) on the reverse of the larger tablet (PL. IV, No. 2), holding in his hands the rod, is to be compared with the two bronze deities figured in De Sarzec's *Découvertes en Chaldée*, pl. XXVIII.

But, peculiar and interesting as is the archaic art of these objects, the inscriptions upon them are still more important, as they present to us a type of writing more archaic and more nearly approaching the original hieroglyphics than anything hitherto known. In a letter to me, Professor Hommel speaks of these tablets as in this respect *ausserordentlich wichtig*, and their genuineness, he says, is "beyond question." It will be seen that the inscriptions are divided into short vertical lines, each containing from one to three characters, and that these are to be read downward, as in Chinese. This agrees with what was already known, that the earlier upright forms of the hieroglyphic characters have been turned over on their side in the ordinary writing. Dr. Hommel calls my attention especially to the bird with wings and feet, in the second upper column from the right end of the reverse of the larger tablet, as giving the long-sought groundform for *nam*, which also has the signification of *bird*. For the oldest form previously known, see Amiaud, *Tableau comparé*, No. 28. Dr. Hommel says, also, that the dots, or circles, are numerals, each dot standing for *ten*; and that the whole is a list of offerings. Among the other noticeable hieroglyphic pictures may be mentioned (under the bird already spoken of) a human head, and in the same column a plow; also, a fish, a hand, a fortification, and serpents. On the reverse of the smaller tablet we find, in the first register on the left, a jug and a plow; in the second, an altar, what looks like a bird's wing on a pole, a hand and two arrows; in the third, two fish; in the fourth, a palm-tree.

WILLIAM HAYES WARD.

NOTES.

EARLY ATHENIAN-IONIC CAPITALS FOUND ON THE AKROPOLIS.

The publication by Mr. Trowbridge (pp. 22-27) of archaic capitals of votive columns from the Akropolis is an important contribution to our knowledge of the earlier phases of Attic-Ionic architectural forms. From the circumstances of their discovery, it may be inferred that they antedate 480 B. C. ; and, from the character of the inscription found upon the shaft of another capital of the same class (cf. BOETTICHER, *Akropolis*, figs. 23-25 with ROBERTS, *Greek Epigraphy*, pp. 100-101), that they cannot antedate the year 500 B. C. by more than a very few years. The variety in the forms of these early-fifth-century capitals is extremely interesting, though the line of development may not be so simple as that

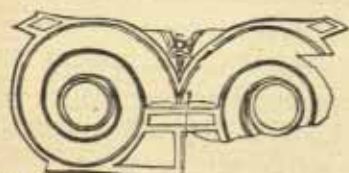


FIG. 8.—Inlaid wood from the Bosphoros.

indicated by Mr. Trowbridge. *Figure 2* presents a mode of uniting the spirals best suited to the crowning member of a square pier or of a pilaster, and appears from figured representations to have been frequently employed in the decoration of furniture. A striking parallel to this form, which we reproduce in *figure 8*, is published by Semper, *Der Styl*, II, p. 249 ; by Schreiber, *Kulturst. Bilderatlas*, Taf. 73, fig. 3, from *Antiq. du Bosph. Cimmér.* pl. 80, 19. In this instance, the ornament is engraved upon a thin plate of boxwood. The figured quadriga from another fragment of the same object enables us to assign it, at the earliest, to the last quarter of the fifth century. How long the form survives in Greek and Roman art we need not here inquire. Its early history and its derivation from the Egyptian lotus may be best studied in Mr. Good-year's paper, *A. J. A.*, vol. III, pp. 271-303. The frequent use of earlier phases of this form in Egypt, Babylonia and Kypros establishes a probability in favor of its appearance in early Greek art.

The mode of uniting the spirals given in *figure 3* was known to the Greek potters of Melos (*A. J. A.*, vol. III, pl. XXI) in the eighth and seventh centuries, and other methods, as is well known, were practised

by Assyrian, Hittite, Persian and Phoinikian architects and sculptors; so that the Greeks of the sixth and the early-fifth century were not in the position of evolving the Ionic capital from a single form, but had a choice of several. The mode of uniting the spirals, as well as the junction of capital and shaft, exhibits the experimental stage. The horizontal bands of *figure 2* are more than a later introduction from æsthetic considerations. They appear, in one form or another, in all varieties of the Egyptian lotiform column and in all subsequent derivative forms. In the earlier examples they appear below the capital, here they reach the level of the spirals. Their absence from both shaft and capital, if this were the case in the Chigri instance, would be a strange anomaly. Nor should the appearance of the abacus in the capitals of the Akropolis be accounted a step in the development, as its pre-Hellenic character is beyond dispute, and its absence even in the earliest Greek forms should excite surprise. It is also clear that the projecting echinus cannot be explained from purely constructive considerations. When the upper diameter of the column was less than the width of the capital from front to back, the union might have been made by rounding down the capital to meet the shaft, or by a rounding up of the shaft to meet the capital; or the unpleasant effect of a projecting capital might have been avoided by the introduction of a moulding which need not have projected beyond the face of the capital.

From the earliest Egyptian prototype to the latest Roman, the width of the shaft, as a rule, remains less than the width of the capital. The apophyge at the upper extremity of the Ionic column seems to be a reminiscence of one of these early experiments. In the Chigri instance, the shaft swells out to an elliptical shape to meet the elongated capital. Even when the upper diameter of the shaft is equal to the width of the capital from front to back, there is no constructive necessity for a projecting echinus, as a curved moulding might have been invented which should vanish into a vertical line at the central part of the capital, without projecting beyond its face. But such a moulding would be not only difficult to carve, but to the Greeks aesthetically objectionable. The transition from the rounded shaft to the rectangular capital could be much more easily and satisfactorily accomplished by means of a simple torus or beak or echinus moulding. All of these seem to have been employed in the experimental period, before the Ionic capital reached its fully developed form. The existence of such a moulding in Ionic capitals need not be accounted for, when once we recognize in

it the traditional encircling mouldings or bands which decorated the necks of lotiform capitals from earliest times. But its removal from the neck into the body of the capital and its projection beyond the face of the capital require an explanation. These changes may have arisen from the real or apparent support which the elevation of the moulding would give to the overhanging and apparently overburdened volutes. The widening of the diameter of the column accomplished the same purpose, driving the moulding still further from its original position and forcing it to project beyond the face of the capital.

ALLAN MARQUAND.

THE EXCAVATIONS IN IKARIA BY THE AMERICAN SCHOOL OF
CLASSICAL STUDIES AT ATHENS.¹

The excavations, carried on during the winter, in the Attic Deme of Ikaria, "the first home in Attika of the god Dionysos and the birthplace of the Greek drama," seem to be, with the exception, perhaps, of those on the Athenian Akropolis, the most important of the season in Greece. At a recent meeting of the German Institute in Berlin, Professor Ernst Curtius declared that these discoveries were "epoch-making." It is certain that "seldom have excavations on Greek soil rendered more speedy and brilliant results than have those now conducted at Ikaria by the American School. Within six weeks from the beginning of the work, although only half-a-dozen men were employed at first, a museum of antiquities has been formed, besides the determination of an important site." The site was discovered last May, by Professor Milchhöfer, on his way from Marathon to Athens, and he conjectured the site to be that of Ikaria, and a most promising one for excavations (*cf. JOURNAL*, III, 439). The ruins lie at the foot of the northeast slope of Mt. Pentelikos, in a thick grove of pines. Permission having been obtained by Professor Merriam, Director of the American School, the work was begun in February, under the management of Mr. Buck of Yale. The site is near the ruins of a Byzantine church. This church-ruin lies upon an alpine farm which from time immemorial has borne in peasant speech the name *Stó Diónyso* (*Diónyson* is the official term). It was hoped to completely unearth a choragic monument which apparently had been used as the apse of the church. The ancient architrave of the monument lies near at hand, with the names of those patrons of the *choregoi* who built it to commemorate their triumph in a

¹Several accounts have appeared in late numbers of the *N. Y. Nation* (March 8, 22, 29), from which the above summary is made.

tragic competition held in honor of Dionysos. The second point, the identity of Dionyson with Ikaria, has been most satisfactorily concluded. It has rarely been possible to more conclusively identify a township in Attika by means of inscriptions. At Dionyson the number of inscriptions, various in kind, upon which the name *IKAPIEYΣ* occurs, is very exceptional. Beside one gravestone found not far distant, two others, a votive and a sepulchral inscription, and two decrees, all containing the name, were unearthed on the north side of the church-ruin. The long decree reads as follows: *Kallippos was the mover. Voted by the Ikarians to commend and to crown Nikon the town-clerk (demarchos), and that the crier shall publicly proclaim that the Ikarians and the township of the Ikarians do crown Nikon with a crown of ivy, for that right well and duly he hath ordered the festival of Dionysos and the competition. Voted also to commend the patrons of the chorus (choregi), Epikrates and Praxias, and to crown them with a crown of ivy, and further that the crier shall make the same proclamation in regard to them that was ordered for the town-clerk.*

Among the inscriptions found outside the church, there is one boundary-stone which partakes of the nature of a bill of sale, and another which has reference to a dowry and to a mortgage involved in its payment. Furthermore, sure traces of votive slabs and statues have been found, to the number of fifteen. By excavations made in front of the church (that is, west of it), a marble double seat or throne has been brought to light.

Three sepulchral basreliefs were first found. One with three figures, two standing and one sitting: the second representing a bearded man of middle age who stands in profile with a staff resting on his left arm and shoulder: the other half of the scene is missing. The third basrelief represents a beautiful female figure seated with her right arm lying in her lap, while with her left she is lifting the drapery from her bosom. The style of this sculpture is remarkably fine.

Of the statues found at the same time the most important is a more than life-size torso of a male statue. From its considerable size, taken in conjunction with mention in the inscription above alluded to of "the statue," it seems possible to surmise that here we have the chief statue of the sanctuary. The curious persistence of the name of Dionysos applied to the immediate neighborhood gives at least encouragement to further search. The mention of a Dionysiac competition in the long decree above cited suggests even that somewhere here once stood a rural theatre.

Other fragments are: a female head and the torso of a draped statue of a woman. At a point about two miles further inland, a tombstone was found with the following very beautifully cut inscription:

[Π]ΑΝΤΑΚΛΗΣ | [Π]ΑΝΤΑΙΝΕΤΟΥ | ΠΑΘΘΕΙΦΥΣ | ΧΑΙΡΑΜΕΝΗΣ |
ΔΙΟΔΟΤΟΥ | ΙΚΑΠΙΕΥΣ.

This establishes a certain probability in favor of the supposition that the township of Plotheia was near the place where this stone was found, and suggests an intimate and neighborly connection between Plotheia, the township of Pantainetos's son Pantakles, and Ikaria, the township of Diodotos's son Chairamenes. At all events, this gravestone is interesting and almost, if not quite, unique, as being a well-authenticated case where two township names—always excepting the gravestones of husband and wife, or cases of adoption—are found upon a gravestone unearthed away from Athens and Peiraieus.

Among the objects which have been brought to light is a colossal head (ten inches across the face) of the bearded Dionysos, admirably executed, and believed to belong to the sixth century B. C. The front hair is made up into huge archaic curls (each being an inch and a half across), all around the forehead, and down to the ears. The eyes are of the archaic, almond type, and the beard and moustache are elaborately curled. One long slab, which had served (fortunately, face downwards) as the door-sill of a Byzantine church, bears a complete duplicate (except the face) of the celebrated "Warrior of Marathon." Among other works of art are a torso of a young satyr, and another of a colossal statue of a draped male figure. Two slabs are covered on each face with reliefs of processions or sacrifices. Two inscriptions of the fifth century B. C. have been found, of the highest interest for the rural worship of Dionysos. Work has been interrupted somewhat by unfavorable weather; yet each day brings new discoveries which supplement those of the previous days. Within the last week (*Nation*, March 29), news has come of the discovery of the Pythion, or temple of Apollo at Ikaria, with a relief representing Apollo, with long curls, seated on the *omphalos*, holding up a handful of twigs in one hand, and a patera in the other. Behind him stands a woman, while in front is an altar with an adorant. Another relief represents Apollo playing on the lyre. Not far away, a large platform of marble has been found, a marble seat, some bases; and two walls, one of which makes a curve as if it might enclose the orchestra of a theatre. Several other foundations have been uncovered by the trial trenches which have been dug. The field for operations has widened indefinitely, and the thorough examination of the site is a much greater undertaking than was at first supposed. Another ruin in the same valley invites excavation and exploration. The Deme Ikaria now comes to the front with greater distinctness than any other rural district of Attika.

CORRESPONDENCE.

LETTER FROM GREECE.

ATHENS.—In giving general survey of the progress of archaeological discovery in Greece during the last few months, one naturally begins with the **AKROPOLIS**. The Archaeological Society has here entered upon a systematic effort to clear the entire surface down to the bed-rock, where not occupied by buildings; and, in the prosecution of this object, they have pushed the work continuously during the past fall, and it is still in progress, and will not be interrupted, as is the case elsewhere where the facilities for work and living are scant. From the Erechtheion eastward the work has been completed: the bed-rock was reached; and where it descended considerably below the level, as is the case along the north wall, the unimportant places have again been filled in and enclosed by wall-supports. In one spot, some very interesting drums of columns of *poros*, and other architectural members of the old temple probably burned by the Persians, were found in the circuit-wall; and in front of these, at a distance of a few feet, was run the supporting wall: as the intervening space was left open, these valuable remains may be seen at any moment, and each one may draw his own conclusions in relation to them. Beside these and some other architectural remains (detached drums, uncertain walls, and the like) the excavations as far as the watch-tower at the eastern extremity of the height produced nothing of importance. The building at the southeastern end, formerly known as the Chalkotheke, has been completely uncovered, and again filled in to form a plateau, leaving the walls visible, together with the old Pelasgic wall on its northeast side. South and east of this structure the débris has just been removed, and was found to consist of various layers of earth, clay, and fine marble-chips, but very little else. The present museum in its vicinity is not upon the rock, but rests upon a mass of marble and *poros* stones ten to fifteen feet deep, to judge from its surroundings at the west end. Between this and the Parthenon the work is now in progress, and many objects of interest are daily unearthed and deposited in the museum. These consist mainly of blocks of *poros*, pieces of bronze, bits of pottery, *etc.* (the remains of Persian devastation) which were used for filling in the space. The *poros* objects aid materially in our increasing knowledge of that early stage of art, and many will add important chapters to the history of polychromy. (1) Some are the remains of single statues, others probably belonged to groups, which it is hoped will have sufficient additions before the

close of the work to admit of such restoration as will give a fair idea of what they originally were: (2) some seem to be fragments of a huge bull, a portion of the head of which has been preserved in the museum for some time; (3) another, the coils of an enormous serpent, also already represented there by considerable remains. (4) A headless and footless statuette, originally about two feet in height, has the right arm drawn across the breast, aslant, the left arm raised. An undergarment fell to the feet and is disclosed in a broad band down the breast and below. It was painted a deep red, while the overgarment was of a deep blue, which now appears in spots as green. (5) Another figure is about three-quarters life-size, of which remain the shoulders, bust, and a part of the neck. Here the overgarment is red, the undergarment blue. Three long ringlets hang on each side of the neck and descend to the breast, and a shorter one stops at the neck. These are wrought so that they resemble a string of flat beads, strung side by side, gradually tapering in size to the end. In contrast to this uncouth art, is the elaborate throat-ornament wrought upon the stone with the utmost care in varied geometric figures, and the edge of the outer garment adorned with squares enclosing rosettes and chevrons painted in vivid colors. Indeed, the freshness of all these colors is most striking, some of the blue being of the deepest ultramarine. (6) A small head, completely preserved, wears a sort of turban, has enormous staring eyes, protruding nose, wide archaic lips, and, on the left side, a large ear carved on the background of the head-dress so that it extends almost at right angles from the face with the intention of being seen from the front: its size is prodigious as compared with the face. The other ear lies close to the head, but is also very large. (7) Many archaic objects of interest occur among the bronzes, one of which is the head of a griffin that looks like a complete counterpart of one found at Olympia.

The platform composed of large *poros* blocks found just east of the Parthenon has been removed, and the filling beneath it taken out and examined. The blocks of the pavement, however, have been numbered and will be replaced, as before, for a permanent memorial. Beneath it were found a number of inscriptions, mostly upon stelai of Pentelic or Hymettian marble, and all more or less shattered. The platform is supposed to have been constructed to support the temple of Roma and Augustus erected toward the close of the last century B. C., and the inscribed architrave of this temple lies in the vicinity. None of the inscriptions found beneath the platform can well be later than the third century, so that a period of two centuries at least lies between the latest inscription and the construction of the temple. The inscriptions had become, in process of time, broken and utterly useless, and were used for filling. This would hardly be the case with documents recently inscribed, and we are thus either furnished with a cri-

terion of the time allowed or likely to elapse in such cases before making way with the objects, or else the platform was an earlier construction than has been supposed.

Inscriptions.—(1) The oldest of the inscriptions is upon a large *poros* base, one end of which is gone, together with a portion of the inscription. The letters are about two inches high and deeply cut in boustrophedon order with the triple marks of division after some of the words. It contains a dedication to Glaukopis the daughter (of Zeus) by several persons, and it is especially interesting as adding another instance, to the two already known, of the occurrence of *koppa* in Attic monumental inscriptions. It may well belong to the beginning of the sixth century. (2) From the waning years of the following century, we have, in the old Attic alphabet, some fragments only; but one, while broken at the top, is still complete enough to disclose its chief purport. Leonides of Halikarnassos has been of such service to the Athenian people that they extend to him their especial protection on land and sea wherever the Athenian power holds sway, and, if anyone injures him, vengeance shall be exacted as if he were an Athenian citizen. This the Prytanes and Senate shall see to at Athens, and all Athenian officers and magistrates beyond its bounds. He is praised for his benefactions, and at his expense the decree shall be inscribed on two stelai, one to be placed in the Akropolis, and the other in the sanctuary of Apollo in Halikarnassos, already known to us from the famous Halikarnassian inscription discovered by Mr. Newton. This laudation of Leonides will not fall much later than 420 B. C. at furthest, as is shown by the retention of the dative ending—*ῆσι*, as in *τῆσι ἀλλήλοισι*, which disappears about that time. (3) A fragment bearing the commencement of several lines can be assigned exactly to the year 398–7, because the preamble is precisely the same as that of *C. I. A.*, II. 652, with the names of the Treasurers of Athena and the other deities, and assists in supplying two of the names there missing. The remainder treats of offerings in the temple, but only in a fragmentary way. (4) The most important of the series, historically, is a decree in which the Methymnaeans of Lesbos are admitted to the general alliance of the Athenians and their allies. Unfortunately, the heading is mutilated and the name of the archon lost, and we are left to the contents alone to determine the date. That it belongs to the time when the second maritime confederacy of Athenians was formed in 378–7 seems inevitable, notwithstanding some apparent difficulties. These difficulties justify a complete translation of the decree, which runs as follows: "Simon was president and Astyphilos moved: Touching the statements of the Methymnaeans (be it decreed that) as they are allies and well disposed to the Athenians, in order that they may enter into the alliance also with the other allies of the Athenians, the secretary of the Senate shall inscribe

them just as the other allies are inscribed (*ἀναγράφαι αὐτοῖς . . . ὥσπερ καὶ οἱ ἄλλοι σύμμαχοι ἀναγεγραμμένοι εἰσὶν*), and the embassy of the Methymnaeans shall swear the same oath which the other allies have sworn to the Synedroi of the allies, and to the Strategoi (of the Athenians) and the Hipparchoi, and the Synedroi of the allies and the Strategoi and the Hipparchoi shall swear to the Methymnaeans in like manner: and Aisimos and the Synedroi upon the ships (?) (*Αἶ . . . μὲν καὶ τὸς συνέδρους τὸς ἐπὶ τῶν . . . ὡν ὅπως ἂν, κ. τ. λ.*) shall see to it that the magistrates of the Methymnaeans take the oath like the other allies. Furthermore (be it decreed) to praise the city of the Methymnaeans and invite their ambassadors to the hospitality of the city."

It is from Diodoros (xv. 28-9) that we obtain the fullest account, in our literary sources, of the formation of this maritime confederacy which reinstated Athens in that supremacy of the Aegean which she had lost at the close of the Peloponnesian War, had recovered slightly under Konon, and abandoned definitely in the peace of Antalkidas. As soon as the Theban patriots had recovered, by the aid of Athens, their Kadmeia from the Spartan garrison, the Athenians sent out deputies to the cities of the Aegean still under Spartan rule, exhorting them to freedom and promising assistance. The first to accept, Diodoros says, were the Chians, and Byzantians, and after them the Rhodians, Mytilenaeans, and some of the other islanders. We have, furthermore, several inscriptions relating to the subject, given by Dittenberger (*S. I. G.*, 62-65), the longest of which (63) belongs to the year 378-7, and provides for the entering of the names of the allies already existing, and of such as may afterward join the confederacy, upon a stele to be placed beside Zeus Eleutherios. Upon this stone, which was discovered many years ago, are inscribed the names of a large number of allies, of which the following only, according to Köhler, are written at the same time as the decree and by the same hand, namely, the Chians, Mytilenaeans, Methymnaeans, Rhodians, and Byzantians. Another stone (*S. I. G.*, 62) contains a separate decree in which the Byzantians are admitted to the alliance then already existing, and no doubt prior to the longer decree, and passed before the Athenians felt so assured of forming a wide-reaching alliance as to have formulated all the terms and prepared for inscribing the names on a single stele. That separate decrees in the case of each city were inscribed, besides entering the name on the common stele, is certain from the Chalkidian and Korkyraean decrees (*S. I. G.*, 64, 65), the latter of which falls three years after the formation of the confederacy. Our decree, therefore, I conceive to have been passed, like the Byzantian, a short time previous to that providing for the common stele, though not within the same prytany, because the scribes are different, and the expression "inscribe them just as the other allies are inscribed" refers, not to

the common stele (*S. I. G.*, 65. 14), but to the separate one which we now have and which is not otherwise provided for, as the decree is mainly devoted to the manner of taking the oath. If, on the other hand, the expression does relate to the common stele, we have the difficulty of accounting for the name of the Methymnaeans appearing there already, according to Köhler. The forms of the letters and the orthography accord with this period. The spurious diphthong *ov* is habitually written *o*; *ε* both as *ε* and as *ε*. Aisimos, who is delegated to administer the oath to the magistrates of the Methymnaeans at home, is doubtless the same person mentioned by Lysias (*xiii.* 80-1) as leading the pomp when the Liberators returned from Peiraeus to Athens in 403, and who was sent, about 387, to Chios as one of five to perform there a duty similar to the present one, when an alliance was made between the Athenians and Chians. That he was at the time in the fleet somewhere in the vicinity of Lesbos, together with some of the delegates of the allies, is a reasonable supposition, and is the ground for supplying *ρεῖν* in the broken passage. We know that, in this alliance, the Synedroi were several in number from each city, though each member of the alliance had but one vote in the general council at Athens. At the outset, when the Athenians were so careful to impress upon the allies (*Diod.*, *xv.* 29; *S. I. G.*, 63. 27) that they were not seeking their former tyrannical power, but only an equal alliance against the Spartans, what more natural than that they should desire that some of the delegates should remain with the fleet to assist the Athenians and watch matters in the Aegaeon.

(5) Not long after the foregoing inscription, may be placed, with probability, another, in which an Achaian Lykonatos is praised and made a proxenos of the Athenians, and is allowed to bring from Achaia the ship that he wishes, and to import wares by sea into any city the Athenians rule and into the garrisons of the Athenians and into the Gulf—. Here the stone is broken, but the circumstances point to the Korinthian Gulf, and to a state of blockade there kept up by the Athenians, during which no Achaian vessel could pass in or out without special permission. The form of the spurious diphthongs, uniformly *o* and *ε*, confines the decree to the first half of the fourth century; and the Athenians seem not to have blockaded the Korinthian Gulf, and at the same time to have been on good terms with Achaia (*cf.* *Xen., Hel.*, *iv.* 6), from the close of the Peloponnesian war till the expedition of Timotheos in 375 to Korkyra. During the greater part of the period from this time on till peace with Sparta in 371, the Athenians had command of the western coast of Greece and maintained a fleet there. It is to this period that this inscription would seem most easily to belong. (6) The name of the archon Kallimachos, preserved in another decree, at once fixes its date in 349-8. (7) Theogenes of Naukratis in Egypt is praised for his good offices to Athenians visiting his

native town, and he is made a proxenos of Athens. (8) Some other proxenian decrees are too fragmentary to be of general interest. One, however, becomes so by reason of the stele being crowned by one of those beautiful bas-reliefs of the fourth century, of which the Akropolis Museum contains several, some of which have been figured by Schoene, *Griechische Reliefs*. They generally depict Athena, standing or sitting, with arm extended towards the chief god or hero of the city to which the proxenos belongs, and sometimes the proxenos himself, the latter being of smaller stature than the divinities. Unhappily, our stele is mutilated at the top so that the heads of the figures are missing, and it is broken across by a diagonal fracture which injures somewhat the lower part; while only a portion of the inscription is preserved. Athena is represented seated upon a chair over whose back she negligently throws her left arm, while she stretches out her right towards a smaller male figure standing before her. He is clad in himation reaching to the feet, his left arm hangs by his side, and his right passes across his breast toward the goddess, as if ready to accept whatever it is she offers. Beside her chair rests her helmet with high, round crest, and against the back leans her shield. Upon her knees stands a large bird with slightly opened wings: its body is turned toward the male figure, but its head is turned back to face the goddess. Its head is mutilated, but the outline is perfectly plain and shows that it is not the expected owl, such as rests on the hand of Athena in one of these stelai in the Akropolis: on the contrary, it is unmistakably of the eagle-type. Below the relief is an inscription to the effect that two sons of Leomestor and three of Diagoras, of Abydos, are proxenoi of the Athenians. On examining the coins of Abydos, we find that the most frequent type from the sixth to the third century is that of an eagle with wings closed, or nearly so, looking back. We may therefore infer that the artist intended to emphasize the close tie between Athens and Abydos by seating the bird of that town upon the knees of Athena. The art of the relief is of a high order, the drapery in particular being handled with admirable taste and sureness of hand, and the attitudes of the figures are full of dignity and grace. The inscription is of the fourth century. (9) Another relief, of which about half is preserved, represents a procession of horsemen of the same motive as that given by Schoene (*Griech. Rel.*, No. 79): even the peculiar hat with down-falling brim is the same. An equestrian victory is probably depicted in both, and the inscription on the corona of our stele, though but half-preserved, is confirmatory. (10) An inscription of the year 303 is interesting as the earliest (by some twenty years) epigraphic document relating to the Epheboi. The existence of this class in the State at Athens in the fifth century is inferred from Thoukydides and Xenophon, and is more definitely mentioned by Demosthenes and the so-called Platonic Axiochos;

but the inscriptions relating to it have heretofore not mounted above the third century. A certain Philonides is praised because he has performed his duty to the Epheboi of the Pandionian Tribe, as Sophronistes, with so much fidelity and acceptance in the eyes of the fathers of the boys, and he is to be crowned with a crown of olive. (11) Three fragments of inscriptions, two on opposite sides of the same stone, belong to a series of which less than a dozen have been published, and about which little is known. They are mostly of the same tenor: such and such a person, male or female, not a citizen ἀποφυγών (ἀποφυγούσα), from such and such a person, usually a citizen but not always, consecrates a phiale, uniformly of the weight of 100 drachmas. Köhler thinks that the consecration is made by a freedman or freedwoman on acquittal from a trial for remissness of duty to a former master, but acknowledges that there are grave difficulties in the way of this interpretation. The present inscriptions unfortunately do not solve the difficulties.

Besides the work upon the Akropolis, during the month of December a number of graves were opened in the outer KERAMEIKOS, about a quarter of a mile nearly due north of the Dipylon Cemetery, just on the outskirts of the present city. Within a foot of the surface have been found many rough terracotta coffins with Roman remains and a Latin inscription. The remains are insignificant, and are regarded as unworthy of preservation. Below these, at the depth of five to six feet, the graves of a good Attic period are reached, in which occur red-figured vases of fine clay and excellent workmanship, and many lekythoi. I saw ten of these taken from one grave: they were disposed along the sides of the body, and some were extracted entire, but others were more or less broken. Seven were of the white variety with red figures of the usual sepulchral style, and three were somewhat coarser, without the white coating and decorated with ornamental designs in black. Some headstones have also come to light with the names of the deceased.

ELEUSIS.—The Archæological Society has been continuing its excavations here, under the supervision of Ephor PHILIOS, who has for so long made this his special task. This year, the work has been pushed mainly in the vicinity of the Propylæia of Appius Claudius Pulcher, between which and the rock of the akropolis to the west was found the temple of Plouton already known from an inscription. It lay in a recess of the rock, and behind it were some grottos formed by the overhanging cliff, which may have had some connection with the worship of the divinity. The grottos run around toward the north, and end in a narrow projection of the rock. Outside this, rise a series of 5 or 6 steps cut in the solid rock, and, as if leading from them, is an oval hole through the projecting wall, large enough for a person to crawl through. As the steps otherwise lead to nothing except the steep face of the cliff, it

seems as if they must have had some ritualistic use. North and northwest of this, the excavations have disclosed several Roman structures, and among them have been found some inscriptions—partly Roman, partly of a good Greek period, and one in archaic Attic. Two or three of these are of some length. Among the sculptures, may be remarked a female standing figure without a head, which was originally set on. This is Roman and of mediocre work. Another, a sitting figure, is very poor. Some fragments of a Herakles exhibit the lion-skin as the prominent feature. Much remains still to be done north of the akropolis, and the work will be continued after the winter is over.

In the neighboring village of **MANDRA** was found a relief, which has been brought to the Central Museum. It is naturally designated a relief, but the figures stand almost free from the slab behind. The main figure is that of a bearded warrior, nearly life-size, standing in a pensive attitude with left leg crossed over the right and resting on the toes: over the chiton is fitted a close cuirass, and a chlamys rests behind his shoulders and is turned around each arm so as to float backward: his hair is short and curly. The face and chest are of excellent and pleasing workmanship, but the hands and feet are bad. A pudgy-faced youth stands by him and holds up to him a helmet, while his shield rests against the slab behind.

MYKENAI.—Excavations have been carried on, here, by the Society, and they have resulted in the discovery of the ancient nekropolis, where fifteen tombs have been opened: there were found many archaic engraved sealing stones, small gold ornaments, objects of glass and ivory, an ivory plaque with the representation of human figures, two mirrors, and two bronze razors. A tholos-tomb was discovered but has not yet been excavated.

EPIDAUROS.—Ephor **STAES** was engaged here, for a short time, in uncovering a Roman building in which were found some good mosaics. It belonged to the extensive system of baths erected there by the Romans.

OROPOS.—Ephor **B. LEONARDOS**, who has conducted excavations, for the last two years, on the site of the **TEMPLE OF AMPHIARAOS** near Oropos, has kindly furnished me the following account of the work: "Toward the east of the so-called *Scala* near the Euripos, on the road to the village of Kalamo and distant about 20 minutes from the latter, lie the remains of the ancient oracle of Amphiaraos. According to the myth, this hero after his escape from Thebes was swallowed up by the earth there, and was first worshipped as a god by the Oropians (Paus., I. 34). The site of the Amphiareion has been ascertained by the excavations which have been carried on since 1884 by the Athenian Archæological Society; and these have been very productive, especially in architectonic and epigraphic finds. Previous to the excavations, only some inscriptions were to be seen there, not remaining in position but fallen to the ground. The Amphiareion was situated in a nar-

row valley bounded by pine-covered hills, from which the view toward the Euripos and Boiotia is most magnificent. The valley is intersected by a winter-torrent, and by the waters of the historic fountain which have been shown by chemical analysis to be among the purest in Greece. The Sanctuary, on account of the salubrity of its air, the purity of its waters, and its position on the route from Athens to Eretria, possessing also an excellent harbor (the Delphinion), was anciently a favorite resort to which especially those betook themselves who wished to recover their health by the appearance of a dream or to obtain some other favor from the god. Now, also, the spot, in addition to the charm of its surroundings, awakens in the visitor the keenest interest by the number and the size of the ancient objects still preserved. Anciently, those visiting the Sanctuary must perform the customary rites, and, having sacrificed a ram and spread the skin on the ground, they lay down to sleep awaiting the appearance of the dream. Hence, there was a *koimeterion* and a special building for bathing (as shown by inscriptions, but not yet discovered), as well for the women as the men. So Amphiaraos like Asklepios was regarded as a physician, and was worshipped in conjunction with Hygieia. The attractions of the place were also heightened by the quinquennial festivals at which musical and gymnastic games were celebrated, as is proved by inscriptions discovered in the course of the excavations.

"Near the fountain, the temple mentioned by Pausanias has been discovered by the excavations, and also the great altar in front of it (to the east). The temple was of the Doric order *in antis*, with a door and porch behind: within, it was divided by a row of columns into two aisles. Along the walls of the pronaos were benches. The statue of the god must have been of superhuman size, to judge from a piece of an arm found in the temple.

"The altar was anciently quintuple, and sacrifices were offered upon it to several gods: but in time it was united, apparently, into one common altar.

"Wholly unknown, from ancient sources, was the theatre which has been revealed to us by the excavations, as well as the stoa and a series of inscribed bases of statues. The theatre is notable as well for its architectural peculiarities as for the fact that it is one of the best-preserved in Greece. The *skene*, of which the walls are very well preserved, has a Doric cornice of marble, with an epistyle upon which is inscribed the name of the person who erected and consecrated it (probably a priest), and the *analemmata* stand unharmed. The doorways of the *eisodoi* were apparently of the Ionic order. Most worthy of note, however, is the *proskenion*, almost all the parts of which have been found. Its front toward the orchestra is adorned with 10 Doric half-columns of marble, all standing unharmed. The spaces between these columns were filled by frames containing pictures, as is proved by the inscription upon the epistyle above them; but the

space between the two middle columns was occupied by the door, which is opposite to that of the *skene*. Around the orchestra in the form of a semi-circle stand, still *in situ*, five marble thrones bearing inscriptions all of the same purport. Behind these extend the remains of the other seats of *poros* stone. The floor of the orchestra was not paved. The drain of the theatre passed out through one of the *eisodoi*.

"The Stoa, which clearly was destined for the accommodation of visitors, is worthy of mention in the first place on account of its length, which amounts to nearly 110 metres. Walls excellently preserved enclose three sides, and a row of Doric columns ran along the front. Within, along the walls, runs a row of 73 supports of benches of marble, above which, upon the coating of the walls, colored ornaments are preserved in places. The stoa is divided into three parts—the larger central hall and two wings which were cut off from the central hall, probably by gratings. The central hall is again divided lengthwise by a row of Ionic columns.

"The pedestals of statues which have been found are mainly distributed in a long line running from the stoa westward toward the temple and to the north of it. Their inscriptions show that they were erected to famous men or to private individuals. Many of them were afterward reconsecrated to illustrious Romans, as Sylla, Agrippa, *etc.*, but of their statues only a few remains have descended to us. A relief was found transmitting to us the type of the god worshipped there, who is represented like Asklepios resting upon a staff around which is twined a serpent. Beside Amphiaraos, who is standing, Hygieia is represented sitting upon a rock.

"The excavations, which have been closed for the winter season, will be resumed in the spring."

THEBES.—The fortunate discovery of the **TEMPLE OF THE KABEIROI**, about an hour west of Thebes, was due to Dr. WOLTERS of the German Institute. He found a small bronze bull in the possession of a private person in Athens, and, upon examining it, discovered a much-obscurd inscription, which was deciphered, after great pains, and revealed the fact that it was consecrated to the Kabeiroi. Finding that it came from Thebes, investigation was set on foot which finally resulted in ascertaining the site of the temple. The German Institute immediately began excavations which have produced an extraordinary number of finds of votive objects, bulls, lions, pigs, and other animals and birds, made of bronze, lead, and terracotta, and many fragments of vases. As large numbers of these are inscribed with dedications, they will throw great light upon the curious and little-known worship of the Kabeiroi. The excavations have been interrupted by the severity of the weather, and the objects have not yet been brought to Athens in consequence of the road through Kithairon being impassable on account of the snow.

PEIRAIÆUS.—The inscriptions which were discovered, last year, in the wall of Peiraiæus west of the harbor, and were believed by M. Foucart to reveal the existence of a temple of Aphrodite in their vicinity, have led the French School to undertake excavations there. The discovery of the Aphrodision, however, has not yet rewarded their efforts, but they have laid bare two fine towers in the wall.

EXCAVATIONS BY THE AMERICAN SCHOOL.

SIKYON.—The American School carried on excavations in the theatre of Sikyon, for nearly four weeks, under the efficient supervision of Mr. M. L. Earle of Columbia College. The *cisodoi* and the orchestra were cleared of their deep deposit of earth, and in the orchestra were discovered at first a head and then, nearly two weeks later, a torso. When the head was applied to the torso it was found that the break upon the neck fitted so far as to render it certain that they were of one and the same statue. It represents a youthful male figure, quite nude except the left arm which is enveloped in a garment falling from the point of the shoulder to below the hip. The workmanship is of a good period, and the statue, while it is not of the highest art, is of the utmost interest for the fine pose of the head and expression of the face, and for other peculiarities which will be treated later, as well as from the fact that it comes directly from the seat of the famous Sikyonian School. A marble head of smaller dimensions, found at Sikyon by a peasant some years ago, has also been brought to the Central Museum of Athens. It is a very pretty female face, but of a type far more familiar than that of the statue.

IKARIA.—The American School has also obtained permission to excavate a Byzantine church northeast of Pentelikon, where, last year, Professor Milchhöfer discovered an inscription that was thought to determine the site of the ancient Ikaria, which was placed by Leake in that vicinity, but by Ross northwest of Athens (*cf.* JOURNAL, III, p. 439). The excavations will be conducted by Mr. C. D. BUCK of Yale College.¹

AUGUSTUS C. MERRIAM.

Athens, Greece,
January 24, 1888.

¹ A preliminary account of the results of the excavations in February and early March (since Professor Merriam wrote the above) is given on pp. 44-46. Ed.

REVIEWS AND NOTICES OF BOOKS.

L'ARCHÉOLOGIE ÉGYPTIENNE, par G. MASPÉRO: Paris, Maison Quantin, 1887. 12mo, pp. 318.

EGYPTIAN ARCHÆOLOGY, by G. MASPÉRO: translated from the French by *Amelia B. Edwards*: New York, G. P. Putnam's Sons; London, H. Grevel & Co. 1887. 12mo, pp. XII, 328.

In this little volume, Professor Maspéro furnishes us with an admirable survey of Egyptian Archæology. Three chapters are devoted to Architecture, one to Painting and Sculpture, and one to the Industrial Arts. In treating of Architecture, he lays before us the leading characteristics of the private dwellings, from the hut of the poorest peasant to the palaces of the nobility; of fortresses purely Egyptian, and those which were built under foreign influence; and of public works, such as graneries, reservoirs, and quarries. At greater length he sets forth the temple architecture, giving some account of the materials and mode of construction, the various classes of columns and of the temple types as exemplified in the early, simple but grand, Temple of the Sphinx, the more beautiful peripteral temple of Amenhotep III at Elephantine, the complex structures at Karnak, Luxor and Abydos, and the rock-cut temples at Gebel Silsileh and Ipsamboul. Thus far we have met with little but what may be found in Perrot and Chipiez's volume on Egypt, and in the handbooks; but the section on temple decoration throws a new and interesting light upon our conceptions of Egyptian Architecture. He tells us that the temple was built in the likeness of the world, as it was known to the Egyptians. The world to them was a long, narrow plane, which supported by four immense pillars a flat or slightly vaulted sky. The temple floor represented the earth; the columns and walls, the pillars; and the roof, the sky. Hence, the bases of columns and the walls near the ground were decorated with floral or other simple figures; the ceilings were painted blue and figured with stars or zodiacs; while the side-walls, suspended, as it were, between earth and heaven, illustrated the official relations between Egypt and the gods. Here were represented the mediating king and his attendants in the presence of the gods. As the sun (according to the texts), in travelling from east to west, divided the universe into two worlds, that of the north and that of the south; so the temple was divided, by an imaginary line passing through the axis of the sanctuary, into the temple of the north on the left and the temple of the south on the right. This division extended to each chamber of the

temple and controlled the decoration. Thus, the divinity is represented on the right wall as receiving the offerings of the south, while on the left he receives those of the north. These sculptured scenes were not mere decoration, but served as amulets, ensuring to the god the continuance of homage, and to the king the granting of the divine favor. Even in the most complicated scenes, Professor Maspéro recognizes a thread of unity which binds together a multitude of episodes into one continuous chain. A vivid conception of the significance of the Egyptian temple and of its ultimate purpose is conveyed in the description of the statues of the gods used in the ceremonials (p. 106): "They were animated, and in addition to their bodies of stone, metal, or wood, they had each a soul magically derived from the soul of the divinity which they represented. They spoke, moved, acted—not metaphorically, but actually. The later Ramessides ventured upon no enterprises without consulting them. They stated their difficulties, and the god replied to each question by a movement of the head. . . Theoretically, the divine soul of the image was understood to be the only miracle worker; practically, its speech and motion were the results of a pious fraud."

The chapter on Tombs is the more interesting and instructive because of the insight given into the psychology of the Egyptians. It was this which determined the arrangements of the mastaba and pyramid and catacomb. The eternal house of the departed contained a chapel with its *serdab* or hiding-place for portrait-statues. This was the abode of the *Ka* or ethereal duplicate of the body, the reception room where priests and friends brought their offerings. The decoration of the chapel-walls portrayed the earthly life of the *Ka*. The sepulchral vault at the end of a long passage or shaft was the sacred abode of the soul (*Bi* or *Bai*). It was undecorated except with inscriptions which related to the sustenance and protection of the soul, incantations against the influence of evil spirits, and passwords which enabled it to enter into the company of the good gods. By their influence, the absorption of the dead into Osiris became complete and it enjoyed all the immunity of the divine state. The section upon the Pyramids has been translated by Mr. Petrie. The extremely careful and detailed study which Mr. Petrie had made of the Pyramids of Gizeh has enabled him to append to the English translation a number of valuable notes which amplify and correct the text. English readers will also be grateful to Miss Edwards for the explanatory notes and for the references with which she has enriched her translation.

The chapter on Painting and Sculpture is illustrated from papyri as well as from wall-paintings, also by a series of sculptures extending from the Ancient Empire to Alexandrian and Roman times. In this series, we notice that the group of General Rahotep and his wife Nefert, usually attributed to the Third Dynasty are assigned by Maspéro to the first

Theban Empire. To make the understanding of this subject more complete, a description of the technical processes is given, in which the mode of preparing surfaces, the tools employed, the methods of cutting and polishing various stones, the pigments and scales of color used at different periods, are briefly treated.

The final chapter contains an admirable *résumé* of the Industrial Arts. Here, as in the earlier portions of the book, Maspéro is not satisfied with presenting a bare morphology of the subject: he initiates us, wherever it is practical, into the ideas which the Egyptians connected with their handiwork. Thus, the carnelian girdle-buckle was the blood of Isis which washed away the sins of the wearer, the frog was emblematic of renewed birth, the diminutive lotus column symbolized the gift of eternal youth, the mystic eye protected one against the evil eye and the bite of serpents, and the scarabæus provided a safeguard against death. Amongst the metal-work, we would call attention to the engraved gold and silver bowls (figs. 275-7) of purely Egyptian workmanship. In view of the prevailing impression that engraved pateræ were not made in Egypt, these examples are of unusual interest. No less interesting is the poignard (fig. 294) with its damascened blade, to which the poignards found by Dr. Schliemann at Mykenai seem to be nearly related. We cannot dwell upon the many objects of glass and clay and stone, of wood and ivory, of bronze and silver and gold, which are here described. The number and variety of these small monuments has been so largely increased in recent years as to demand for them a more methodical study than they have yet received. "It is a task," says Maspéro, "which promises many surprises to whomsoever shall undertake it."

It is refreshing to read a book so comprehensive and yet so well proportioned and compact, so methodical and yet so full of interest. In treating a subject of such extent, it is hardly to be expected that even one who has the acquaintance with Egyptian Archæology that Maspéro possesses should produce a book absolutely free from error. A very few instances in which his inferences are not warranted by the facts have been noted by the Translator and by Mr. Petrie. To these we venture to add one more, which has escaped the Translator's notice, namely, the survival of the inference that the papyrus figures in Egyptian decoration. The so-called papyrus of fig. 279 is identical with the lotus of fig. 228; the alternating bud and flower of the "lotus or papyrus" of fig. 93 is nearly identical with the lotus bud and flower of fig. 245; and the strange conventional form between the antelope and scarabæus on fig. 264 bears no resemblance whatever to a bunch of papyrus. An indubitable instance of the papyrus-form in Egyptian art has not yet been pointed out.

ALLAN MARQUAND.

THE ART OF THE SARACENS IN EGYPT, by STANLEY LANE-POOLE, B. A., M. R. A. S., *etc.* 8vo, pp. XVIII, 264, with 108 woodcuts: London, Chapman and Hall, 1886.

To the average student, the art of the Mohammedans in Egypt is better known than are their monuments in Syria, Asia Minor or India, and yet no general work on the subject, at once comprehensive and satisfactory, has appeared. *The Art of the Saracens in Egypt*, though its title would seem to indicate a survey of Saracenic art in all its branches, confines itself almost exclusively to the smaller arts, and the book might have been more properly entitled "*The industrial arts*," *etc.* Within the period of the twelve centuries that have elapsed since the time of the Arab conquest of Egypt, the three hundred years of Mamluk rule, from the thirteenth to the beginning of the sixteenth century, were most prolific in works of art—particularly of industrial art—and Mr. Lane-Poole devotes himself almost exclusively to this period, giving but a slight sketch of the works of an earlier date, which are neither as numerous nor as decorative.

A summary of the history and condition of Egypt under the Mamluks is contained in the *first chapter*, an introduction very necessary in view of the prevailing slight acquaintance with the subject. The origin and organization, revolutions and brawls, life and amusements, barbarism and luxury of this strange class of primitive, powerful men, are described with a firm and picturesque touch. *The second chapter* is devoted to *Architecture*. This part of the work may be termed incidental: it is given because "no examination of the industrial arts of Egypt . . . would be intelligent which did not start from a clear comprehension of the characteristics of the buildings round which they were grouped. In a work of the present scope it is of course impossible to attempt a history of Saracenic architecture, even in its Cairene development; such a task is worthy of the best endeavors of an architect, and would demand a volume to itself. It will be sufficient for the present purpose if the principal buildings of Cairo are briefly described in general classes, the chief distinctions of style and plan noticed, and a clear conception offered of what mosques and houses are like (p. 49)." In selecting his examples among the 300 mosques, the author had an abundance of material at command, but this was not the case with domestic architecture, as most of the palaces and houses of the Mamluk period have passed away. But little information can be gleaned from these remarks on architecture: even the careful description of Cairene houses hardly applies to the Mamluk period. It would have been better to have omitted this chapter entirely, for the writer here displays a wide unacquaintance with the history and development of architecture. Speaking of the early type of mosque prevalent from the eighth to the thirteenth century, he remarks

(p. 52): "The plan of an open court surrounded by colonnades is, as will be readily recognized, simply a survival of the ancient Semitic temple, as we see it in Phœnician and other ruins." What and where are any such ruins? There may be a question as to whether the Egyptian or the Christian fore-courts and atria were the prototypes of these Mohammedan courts, but no one can suppose the Temple of Solomon or some mythical Phœnician ruins to have haunted the minds of the Cairene architects. Then, in regard to the dome, the author makes the astounding statement (p. 60) that "the origin of the dome may be traced to the cupolas which surmount the graves of *Babylonia*, many of which must have been familiar to the Arabs, who preserved the essentially sepulchral character of the form, and never used it, as did the Copts and Byzantines, to say nothing of European architects, to roof a church or its apse. The form of the true Cairo dome is not quite the same as that of *Italy* and *St. Paul's*." (!) The Arabs might have scoured *Babylonia*, without discovering a cupola over a grave: the Babylonians were content to dwell in double jars or narrow vaults. If Mr. Poole had to go to *Babylonia* for something, why did he not derive the minaret from the staged temples of *Chaldæa*: it would have been very much to the point, and quite a charming development could have been made out from the earliest minaret of Tulun, with its immense massive base, retreating stages and exterior winding staircase, to the slender and tall minaret of the Mosque of Hasan. Quite naïve, too, is his remark about the early use of the pointed arch, on which subject he might be expected to throw some light. He says (p. 56) of the mosque of Tulun (ix cent.): "The arches are all pointed, and constitute the first example of the universal employment of pointed arches throughout a building, three hundred years before the adoption of the pointed style in *England*." Perhaps a visit to some of the Koptic churches, which Mr. Poole must often have passed by, would have revealed quite a different story as to "the first example," a fact which he might have suspected all the more that the architect of the mosque was a Christian Kopt: and then, of course, the pointed style was first adopted in *England* (!), not in *France*. With regard to pointed arches as distinguished from the Gothic, the buildings with only pointed arches built in the xi century, one hundred and fifty years before "the adoption of the pointed style in *England*," are quite plentiful and well known, especially in the South of *France*.

It is pleasant to pass to the following chapters, which are exclusively confined to the industrial arts, where the writer is quite at home—at least so far as *Egypt* is concerned. The topics treated are as follows: *Stone and Plaster* (ch. iii); *Mosaic* (ch. iv); *Wood-work* (ch. v); *Ivory* (ch. vi); *Metal-work* (ch. vii); *Glass* (ch. viii); *Heraldry on glass and metal* (ch. ix); *Pottery* (ch. x); *Textile fabrics* (ch. xi); *Illuminated manuscripts* (ch. xii). Begin-

ning where the author ends, we will quote his conception of Mohammedan decoration (p. 259). "In illumination, as in other branches of decoration, the peculiar character of Saracen ornament is clearly expressed. The effect is that of rich embroidery, or gold brocade; in other words, illumination, like mosaic, plaster, wood, and ivory, shows the tapestry motives of Saracenic art. In the sanctuary of a mosque, or the *kā'a* of a house, in the complicated panelling of pulpit or ceiling, and in the chasing of vessels of silver,—everywhere the same carpet-like effect strikes one."

One is rather disposed to regret the use of the term "Saracens" at the present day, when we ought to have outgrown such appellations based on ignorance. Mr. Poole feels called upon to explain it in his preface. "The subject of the following chapters is what has been commonly known as 'Arab' or 'Mohammedan' Art. Both these terms are misleading—for the artists in this style were seldom Arabs, and many of them were Christians—and the general term 'Saracenic' has therefore been substituted. 'Saracen,' which means simply Eastern, was the universal designation of Muslims in the Middle Ages. . . The word Saracenic, implying the two ideas of Oriental and mediæval, exactly fulfils the conditions of a general term for the art with which we are concerned." It is true that the term 'Arab' would be misleading, as it would, strictly speaking, exclude the greater part of the monuments of the mediæval East, but the term 'Saracenic' has very serious disqualifications. It would be but courteous to call the Mohammedans by a name they would recognize. The objection to the term 'Mohammedan Art' is very thin, for, even if Christian artists were sometimes employed, they worked in accordance with a style which we recognize as strictly and originally Mohammedan. We speak of "Christian Art": perhaps Mr. Poole would suggest that we call the Mediæval art of the West 'Frankish Art,' because the 'Saracens' termed all Europeans 'Franks' in the Middle Ages: but that would not make such a designation any more logical or scientific. The term "Saracenic" is no better. Mr. Poole lays great stress on the brilliancy of art over the entire East during the Mamluk period, and, among other things, attributes to it the introduction of the human figure into the industrial arts through a relaxation of the orthodox prejudice against its use. There is, however, on the pages of the book itself, ample testimony to the contrary (*e.g.*, inventory of works of art belonging to the Khalif El-Mustansir in the XI cent.), showing that the human figure was used, probably derived from Persian art, at quite an early date. Moreover, instead of there being a relaxation of orthodoxy after the invasion of the Tartar tribes in Mesopotamia, the liberty of thought and belief allowed in the flourishing days of the Khalifate was entirely abolished and the narrowest kind of so-called orthodoxy became rampant. If then we must regard these Turko-Tartaric

rulers, whether in the empire of Baghdad or in Egypt, to be the patrons of art as they were of literature and of science, this must not blind us to the fact that the period between the XII and XIV centuries was one of decadence in the East, so far as culture of all kinds was concerned. The art of the time, as well as the culture, was merely a continuation of the development under the Abbasidae of Baghdad and the Fatimids of Egypt: it is only to be regretted that, through the scarcity of extant monuments of this period, this fact cannot be fully proved in every detail.

Reverting to the question of the industrial arts, we find an interesting chapter on the decoration of the mosques in stone and plaster. The more humble and coarse material, plaster, was in general use for the early period of the mosques of Amr, Tulun (878 A. D.), El-Azhar (971 A. D.) and El-Hakim (1012 A. D.), and even in the beautiful mausoleum of Kalaun (1284 A. D.). Stone took the place of plaster entirely in the mosque of Sultan Hasan (1356-59 A. D.): "The ornaments, whether geometrical, scroll or arabesque, are cut in stone or marble." Cairene chiselled decoration reached its perfection in the XV century, as shown by the details of the mosque of Kaït Bey (1483 A. D.) and of his khan near the Azhar mosque.

In the chapter on *Mosaic*, the writer shows an evident lack of familiarity with the general history of mosaics. It is true that the mosaic dado used in Egypt, though it coincides generally with Byzantine mosaic-work in a similar position, differs when glass and mother-of-pearl cubes are used in combination with the marble cubes and *opus sectile*. Still the Byzantine origin of this industry among the Mohammedans is unquestioned. In his description of carved *Wood-work*, a connection is very correctly made with Koptic work: the pulpits of the mosques executed during the fourteenth and fifteenth centuries were the monuments on which the Mohammedan wood-carvers lavished all their skill in designs that are even more graceful and soft than similar work in stone and metal. The tombs, doors and lecterns also received a very elaborate carved decoration, and another interesting adaptation is to be seen in the lattice-work of the windows, in the ceilings, tables, and other furniture of private houses. *Ivory* was used quite profusely, not alone, but usually set in wooden borders: here, especially, we can trace a connection with the beautiful screens of the Koptic churches: "It will be noticed that, fine as is the style of carving, the effect is harder than that of the best period of wood-carving in Cairo . . . The stiffness is the fault, one must conclude, of the material, not of the artist." The chapter on *Metal-work* is the most important and interesting in the book, and contains, not only a critical and historical consideration of this branch of art, but a detailed catalogue of the most interesting works existing in museums. The author considers, in succession, three styles, (1) the Mesopotamian or Mosul work, (2) the Syrian or Damascus school, and (3)

the Mamluk style; the first being of early origin, though, in his opinion, there are no works in museums that antedate the thirteenth century, while the Mamluk style flourished mainly in the fourteenth, and was derived directly from Fatimy and early-Syrian schools. Of *Glass-work* the most remarkable examples are the famous mosque-lamps of enamelled glass, whose material is almost entirely concealed by the gilding and the enamels of different colors. In the chapter on *Textile fabrics*, we see that less originality is shown in this than in other branches, and their dependence on Byzantine models, on the one hand, and on Persian textiles, on the other, is evident. If Mr. Poole had written his book a couple of years later, he would have been able to point out interesting analogies with the wonderful textiles lately found in Egyptian tombs, which are already making their way to European museums, some of which, from Koptic tombs dating between the fourth and ninth centuries, are important for the derivation of Saracenic work. The illustrations, though merely woodcuts, are satisfactory and sufficiently numerous to convey an adequate impression of each branch of art.

A. L. FROTHINGHAM, JR.

GOSHEN AND THE SHRINE OF SAFT EL HENNEH (1885) [Fourth Memoir of the Egypt Exploration Fund] by EDOUARD NAVILLE. 4to, pp. 26; with eleven plates, including maps and plans. London, 1887: Trübner & Co.

The present memoir gives an account of the results of the campaign of the Egypt Exploration Fund during 1885, under the charge of M. Naville. They are by no means so important as the greater part of the investigations of the Fund—in fact, may be considered as the least important. The memoir deals not so much with any important monuments as with the identification of certain sites, the central point of interest being the localization and delimitation of the Land of Goshen.

The first site attacked in 1885 was that of the large village called Saft el Henneh, between Zagazig and Tel el Kebir, which is on the site of an ancient city: "the whole village is constructed on the ruins of old houses." The ground had been already thoroughly ransacked, though the area of a temple was found and cleared. The most important result was the recovery of about one-half of the famous shrine of Saft of the time of Nectanebo II.¹ In connection with this admirable work, M. Naville remarks: "Look-

¹ The following is the table of contents of the volume: *Saft el Henneh*, p. 1. *The Thirtieth Dynasty*, p. 3. *The Monuments discovered* p. 5. *Phacusa, Goshen, Ramses*, p. 14. *Khataanah, Kantir*, p. 21. *Tell Rotab*, p. 24. *Appendix*, p. 26.

ing at the monuments of the two Nectanebos, it is impossible not to be struck by the beauty of the workmanship, as well as by the richness of the material employed. Egyptian art undergoes a new resurrection more complete than under the twenty-sixth dynasty. There is more vigour in the style than at the time of the Psammetichi; perhaps less delicacy than in the works of the Saïte Kings, but a decided tendency to revert to the stern beauty of the works of the great Pharaohs. . . . The Nectanebos did not cut up the colossi of former Kings, or engrave their names on monuments which they had not erected. . . for their models, they seem to have chosen the Kings of the twelfth dynasty." M. Naville instances a number of works belonging to this thirtieth dynasty: he explains the number of monuments erected by the Nectanebos in the eastern part of the Delta, by suggesting the use of the temples as fortresses: "The Nectanebos were constantly exposed to invasions from the east. They had again and again to fight the armies of the Persians; therefore they built these temples which were primarily religious buildings, but which could also be converted into military forts, and thus help in the defence of the country." The monuments discovered at Saft are (1) part of a colossal black-granite statue of Rameses II, indicating the erection here of a temple by this monarch; (2) part of a stele of Nekht-horheb, first ruler of the thirtieth dynasty; (3) monuments of Nectanebo II, including (a) remains of a standing statue of the god Sopt, (b) parts of the great shrine; (4) stele of Ptolemy Philadelphos. The shrine is one of the largest and most beautiful of its kind, being nearly seven feet thick, six feet wide, and over seven feet high, covered with hieroglyphs on all sides: it is dedicated to *Sopt, the lord of the East; the spirit of the East and the Horus of the East*. Sopt is evidently a warlike god, the defender of the eastern frontier of Egypt. The author studies this monument very carefully, giving a translation and commentary of the long inscriptions, which are interesting for the study of mythology.

In the chapter *Phacusa, Goshen, Ramses*, M. Naville studies the extent and position of the nome of Arabia, and its relation to the Land of Goshen. He thinks that the nome of Sopt or Soptakhem = the nome of Arabia: its capital was *Pa Sopt* = *Saft el Henneh*. Ptolemy says that *Phacusa* was the capital of the nome of Arabia. This *Phacusa* is not the modern Fakoos, for Strabo describes the canal from the Nile to the Red Sea as branching off at *Phacusa*, and this position is exactly that of *Saft el Henneh*: this identity is confirmed by the name on the shrine, *Pa Kea*. Furthermore, "when Van der Hardt interpreted the word *Phacusa*, it was not only the Egyptian form of the name (*Pa Kea*), which he discovered, but also the origin of the famous name of *Goshen*," which is read by the Greeks *Γεσέμ*, *Γεσέν*, *Καισράν*, *Κεσράν*. "In fact, it was near *Phacusa* that the land of Goshen was to be looked for. The Septuagint calls it *Γεσέμ* *Ἀραβίας*, *Gesem*

of *Arabia, etc.*" This appellation of the Septuagint M. Naville considers to have "a definite meaning: *Gesem which is in the nome of Arabia.*" He speaks of a number of instances in which this district is named *Kesem*, in Egyptian documents. I can only refer to the book itself for further details regarding this theory: it is but necessary to add that M. Naville agrees to the equivalence of the name of Goshen and Ramses, though he considers the latter to cover a larger area than the former. The term "land of Ramses" was evidently a vague name—not belonging to administrative nomenclature.

A. L. F., JR.

DENKMÄLER GRIECHISCHER UND RÖMISCHER SCULPTUR in historischer Anordnung unter Leitung von HEINRICH BRUNN herausgegeben von FRIEDRICH BRUCKMANN.

MONUMENTS OF GREEK AND ROMAN SCULPTURE historically arranged under the direction of HEINRICH BRUNN, edited by FRIEDRICH BRUCKMANN. Large folio. Munich-London, 1888: Asher & Co.

This colossal work is to consist of about 80 parts at the price of £1 each, and to contain, when completed, about 400 large-folio plates measuring 18 by 25 inches. Professor Brunn's object is to facilitate the comparative study of the works of classic sculpture by collecting into one *corpus* all its principal monuments, reproduced by the very best process—that of permanent phototype. But, as Professor Brunn remarks in his prospectus, "in carrying out this object a careful selection necessarily had to be made. Not only were inferior or average specimens excluded, but even many of better quality which cannot yet be grouped in logical historic sequence, and which, consequently, instead of throwing light on the development of Art, themselves need the light of further scientific research. . . The first consideration was naturally claimed by all such monuments as may safely be regarded as original in conception or execution. Failing these, antique copies could not of course be dispensed with. . . This collection is not intended so much to illustrate the text of a systematic history of Art, as itself to exhibit the very embodiment of such a history. . . Although the arrangement must always be fundamentally historical, it is at the same time obvious that, if followed too closely, this principle itself would be far from achieving the desired object. It must consequently be supplemented not only by a consideration of local schools, but also by adopting such an arrangement of the objects themselves as will best enable them to mutually illustrate and explain each other. The accompanying short text is

intended, not so much to describe the several plates, as to justify the selection and grouping here adopted."

The above quotation gives as clear and comprehensive a statement of the plan of the work as could be desired, and this is certainly most attractive. Here is a specially competent archæologist and gifted writer about to give to students a publication, perfect in its technical form, the fruit of the ripest scholarship and of the most improved methods, and yet we must confess to a feeling of regret and disappointment. Let us now give the other side of the picture, and express our conviction that this work will defeat its own purpose and will never fill the place it aspires to, for two reasons, its price and its size. It will cost \$400, and its great size will render the use of it most inconvenient: not one archæologist in a hundred will be able to purchase it: only the richest libraries will own it; probably not more than four or five libraries in the whole of the United States.

For many years there has been a feeling of relief at the thought that in literature the age of folios had passed, and that of good handy quartos taken its place; but now we are threatened from Germany with an invasion of the worst kind of folios: injurious to the cause of study, because they prevent the issue of reasonable books covering the same ground, and benefit only the few who are rich. In archæology, for instance, such a prohibitory work is that on Pergamon. Why not use the quarto size? It would not only make the volumes perfectly handy, but would leave them just as useful for study, and greatly diminish the price, partly because it would ensure a so much larger sale.

Here, then, is our protest against this exclusive form of publication to which belongs Professor Brunn's projected great work; and it is certainly time to enter such a protest on behalf of the confraternity of students of art and archæology, as well as on behalf of the interested public; and our protest is in the present instance the more emphatic for the reason that the presentation of the results of such a master as Professor Brunn ought to be accessible to all scholars and students.

A. L. F., JR.

ARCHÆOLOGICAL NEWS.

SUMMARY OF RECENT DISCOVERIES AND INVESTIGATIONS.

	Page.		Page.		Page.
ASIA MINOR,	86	HINDUSTAN,	77	PALESTINE,	85
AUSTRIA-HUNGARY,	120	HOLLAND,	119	PHENICIA,	86
DENMARK,	121	ITALY,	102	RUSSIA,	121
EGYPT,	70	KRETE,	99	SPAIN,	116
ENGLAND,	122	KYPROS,	87	SWEDEN,	121
FRANCE,	116	MESOPOTAMIA,	84	SWITZERLAND,	119
GERMANY,	119	MOROCCO,	77	UNITED STATES,	123
GREECE,	90				

GENERAL REVIEW.

The East is again about to become the theatre of excavations on an extensive scale, during this and the following season. A German expedition has lately returned from **BABYLONIA**, and laid the results of its investigations before the Archæological Society in Berlin. The preliminary exploration of Dr. Ward is bearing fruit in America, and an expedition is being formed for the purpose of excavating some of the principal mounds in the Valley of the Tigris and Euphrates. The French are negotiating at Constantinople for a firman under which M. de Sarzec may continue his important excavations at Telloh and its vicinity; whose magnificent results, unfortunately, have as yet been published only in a fragmentary manner. Germany has obtained permission to excavate on an important site in the **HITTITE REGION** of Northern Syria, on the borders of Asia Minor, probably one of those surveyed by Dr. Puchstein in 1882. In England, a *Cyprus Exploration Fund* has been formed, under the patronage of the *Society of Hellenic Studies*, for the scientific archæological exploration of the Island of **KYPROS**, and work is already being conducted there under the direction of Mr. ERNEST A. GARDNER, Director of the British School at Athens. Furthermore, Mr. BENT has been enabled to secure funds sufficient to conduct thorough excavations in the island of **THASOS**, where he achieved such important results last season. In **GREECE**, the most interesting discoveries have been made on the **AKROPOLIS** and in the Attic deme of **IKARIA**. The archaic *poros* sculpture and the early Ionic capitals found among the *débris* on the Akropolis are of historic importance. But the most brilliant success of the year has attended the excavations undertaken, during the last month, in Ikaria by the American School at Athens, of which some preliminary details are published on another page (pp. 44-6).

IN ITALY, with the appointment of Professor HELBIG as Inspector for antiquities of maritime ETRURIA, we may hope for increased activity in the excavations of that region. The really extraordinary results achieved for two years at VETULONIA are only beginning to be published, and attention will be called, in the next number of the JOURNAL, to the fact that they emphasize, more than any previous discoveries, the closeness of the relations between Egypt and Etruria.

It is with great satisfaction that we call attention to the large increase in the number of reviews devoted to archæology and the history of art: this increase has been especially remarkable during the last few months. New reviews have been started in England, France, Italy, Germany and Portugal, and changes in the direction of enlargement and improvement have been made in a number of already-existing periodicals.

AFRICA.

EGYPT.

The *Cairo Journal Officiel* has lately published a decree making it unlawful and an offence to deal in antiquities. It is unfortunate that the British officials should have sanctioned such interference. The decree issued by Said Pasha, giving the Government the right to purchase any antiquities found in Egypt, has been the cause of the destruction of an immense quantity of ancient art, because the natives break up objects or separate them in order to be able to secure some small examples for sale. It has also been the cause of its being impossible to learn the *provenance* of objects—a serious loss to science. This new law will intensify the mischief.—*Athenæum*, March 3.

Under the title of *A Season in Egypt, 1887*, Mr. W. M. FLINDERS PETRIE issues, through the Leadenhall Press, an illustrated account of his recent work in Egypt. The volume deals chiefly with the rock-inscriptions along the Nile, near Assuan, the pyramids of Dahshur, the roads in the Fayûm, and the weights of Memphis. The size is large quarto; and it is illustrated with no less than thirty-two lithograph plates.—*Academy*, March 17.

A. H. Sayce writes from Cairo (Feb. 12) to the *Academy* (Feb. 25), "Mr. GRIFFITH has arrived from Assiout, where he has been copying the inscriptions of the tombs, and has made some interesting discoveries. He is now working at *Heliopolis*. Mr. PETRIE is at *Howâra*, the imaginary site of the Labyrinth. I hear that he has disinterred some mummies there."

EGYPT EXPLORATION FUND.—The fifth annual meeting of the Egypt Exploration Fund was held on Dec. 22 in London, and the official report of it has been issued. It was decided to spend for the present season £500

on excavations at Boubastis under M. Naville, and £200 for Mr. Griffith's expedition to excavate in the Delta. The publications for the year are to be: *Tanis II*; *Naukratis II*; *The City of Onias*.

It is known that during one month's work at the close of last season M. Naville discovered the great temple at Boubastis; a Ptolemaic sanctuary; a noble Hypostyle Hall of XII-dynasty work; the wreck of a Festive Hall with thousands of bas-reliefs, sculptures, and inscriptions. M. Naville estimates that, as yet, he has uncovered not more than one-third of this magnificent ruin, and that some two months more will complete the excavation. He resumed excavations in February.

In dividing the antiquities between the British Museum and the Boston Museum of Fine Arts, the task was, and will be in the future, greatly facilitated by diversity of aim, the British Museum preferring monuments calculated to throw additional light upon the philology and history of ancient Egypt, whereas objects of artistic interest were preferred by the Museum of Boston.

M. Naville delivered an interesting lecture on "Boubastis and the City of Onias," in which he gave a more detailed account than had appeared of his last year's campaign. It is reprinted in the *London Academy* (Jan. 21, Feb. 25, March 17) and in the 5th annual *Report of the E. E. Fund*.

ASSUAN=SYENE.—A partial account was given (vol. II, pp. 206-7) of the excavations carried on here during 1885-86 by General Sir F. Grenfell. In Nov. 1886, Mr. E. A. W. Budge was sent out by the Trustees of the British Museum to superintend further excavations; and in a paper read before the Society of Biblical Archaeology (*Proceedings*, vol. x, no. 1, pp. 4-40; 5 plates) Mr. Budge relates his experiences: we make a few extracts from this interesting paper. At Syene there was, in ancient days, at the water's edge on the western bank of the Nile, a massive stone quay from which a broad double staircase, cut in the rock, ascended about 150 ft. to a platform in front of high tombs. The whole of this remarkable staircase has been uncovered and found to be intact: it is entirely unique. The most important tombs opened were those of Sabben, Mechu and Nechu of the time of the VI dynasty, and those of Nub-kau-Rā-necht and Se-renput of the time of the XII dynasty. The largest tomb is at the top of the above stone staircase, and is that of Sabben, a governor under Pepi II of the VI dynasty: *Sabben, the prince, inspector, president of the South, the extraordinary "emer."* The entrance to the tomb is through a rectangular opening in which is a small doorway about one-third of the height of the opening. The roof is supported by rough-hewn square stone pillars, and there are numerous paintings on the walls and pillars representing Sabben, his son, a priest, etc. From the side opposite the doorway, on the left hand, opened what was originally a second tomb, in which are eighteen

rough-hewn round pillars, which taper slightly toward the roof: the walls and pillars were decorated with paintings representing the deceased and his family. This tomb is of the same period as that of Sabben, and was made for a man of like rank and dignity called Mechu or Chemu. Mr. Budge says (p. 40): "The so-called proto-Doric pillars of the double tomb of Sabben and Mechu are, so far as I know, not to be met with elsewhere." Ascending a little from this double tomb, were several tombs mostly without inscriptions. One of these, made for a man called *Heq-ab*, is remarkable for its shape. Through a rectangular opening one enters a low chamber about 8 by 4 by 3 ft. Each wall has been covered with a thin layer of plaster, on which had been painted the deceased, his wife, and attendants. Many of the scenes and inscriptions are entirely defaced, but a few remain. From a deep rectangular opening in the floor of the chamber runs a narrow passage to the coffin-chamber: in this passage was found a small seated figure of the deceased, of exquisite workmanship (now in the possession of Sir Edward Malet).

Next followed a most interesting and important tomb which, apparently, was originally made for Nub-kau-Râ-necht, an officer under Amenemhat II, the third king of the XII dynasty. It was afterward taken as his burial-place by Serenput, lord of Elephantine. The entrance to this tomb is cut in the solid rock, through a passage of 12 ft., to a spacious chamber with two rows of massive square-hewn pillars, which taper slightly toward the roof. At the end of this chamber, approached by an ascent of 6 steps, is a slightly vaulted passage about 22 ft. long, which was originally closed by blocks of stone. In each side of the passage are three rectangular niches in each of which stands a bearded mummied figure of Osiris. They are all plain and uninscribed save the first on the left-hand side: the inscription on this figure reads: *The chief, the prince, the inspector, the extraordinary "smer," the president of the prophets of Chnem, the superintendent of the frontier, Serenput, triumphant.* On the left-hand side of the inscribed figure is painted a funerary scene representing Serenput son of Sati-hetep and his son prince Anchû. At the end of the above passage is a small square chamber containing four square pillars: on each side of these is a standing figure of Serenput. At the end of this chamber was a rock-cut niche lined with smooth flat slabs of stone, plastered and painted with figures and inscriptions: on the slab facing the entrance was painted the figure of the man for whom the tomb was made, and who is described in the inscriptions as: *Nub-kau-Râ-necht, the devoted to Sati, the lady of Elephantine, and to the goddess Euchebit . . . the devoted to Chnem the lord of Qebh, by Elephantine.* Before the deceased is a table of offerings, by which stands Anchû, the son of his body. On the right-hand slab is painted a table of offerings, and his mother, loving him, the priestess of

Athor, Satihetep, triumphant, the lady of devotion, the daughter of Tenset: behind her stand Serenput and his wife and son. On the left-hand side are painted figures of his son and his beloved wife, *Chnemuaatnet*, and another figure of Serenput, with an inscription in which he is mentioned as *the president of the prophets of Sati the lady of Elephantine, the general of the soldiers*; showing that Serenput, beside holding the ordinary offices of a ruler of Elephantine, was the officer commanding the whole military force stationed there in general, and of the *pechert* in particular, or the body of swiftly-moving and lightly-armed soldiers.

On entering the chamber in which this beautifully painted niche or shrine is situated, is seen, on the right-hand side, a large tunnel or passage, rough-hewn out of the solid rock, which bends to the left and descends rapidly to a square pit, 15 ft. deep, one side of which was formed of sun-dried bricks, on the removal of which, a second pit was disclosed with a like brick wall on one side, which opened into a third square pit, in one corner of which was found a hollow, two ft. deep, out of which opened a narrow passage about 2 ft. wide and 1½ ft. high: this passage led to a fourth square pit or shaft, filled with small stones, which was situated directly under the painted shrine described above. It was impossible to empty this shaft, but it was thought to contain the sarcophagi of Nub-kau-Rā-necht and Se-renput. The above tombs were opened in 1885-86.

The most important work done in 1886-87 was to open a large tomb made, in the time of the XII dynasty, by *the chief, the prince, the inspector, the extraordinary "amer," the prophet, Se-renput (son of Set-Tenā), who was supreme governor of Ethiopia, and president of the countries of the South.* Mr. Budge thinks that this tomb was one of the earliest of the XII-dynasty tombs made at Assuan; that Serenput was the founder of a great family of rulers at Elephantine during the XII dynasty; and that, as governor of Ethiopia and commandant of the garrison of Assuan, he was a man of the greatest importance. The inscription over the door of the tomb states that, when Usertsen I [in the 43rd year of his reign] went to conquer Ethiopia, he was the king's general-in-chief.

Before the tomb was an open courtyard 48 by 41 ft., entered by a doorway formed of blocks of fine, hard, white stone, on which are cut figures of the deceased Serenput. Within the courtyard were found the remains of seven square pillars which had supported a roof of stone slabs, forming a portico. On clearing out the inner chambers of the tomb, it was found that it had been rifled: there were several niches, in which probably had been stone statues of Serenput; and of one chamber the whole wall was covered with plaster which had been painted with scenes from the life of Serenput; but all had disappeared except one piece with a duplicate of the inscriptions outside the doorway, having the cartouch of Usertsen I.

While digging at another part of the hill, were found traces of a second stone staircase, and another tomb of the VI dynasty, made for a *prince and extraordinary "smer," and chief scribe of the god Chnemu*, called Nechu: he lived in the time of Pepi II, whose prenomen is inscribed on the walls. This tomb, like all the others, had been rifled in ancient times, but, though the shrine was broken in and smashed, the paintings had been untouched: a figure of Nechu wearing a spotted leopard-skin is especially fine.

Near the last tomb were found (1) a rock-hewn rectangular tomb, the roof of which was supported by three pillars, (2) a mummy-pit containing 200 uninscribed earthenware pots; (3) a tomb-chamber containing an intact mummy-case on the top of which were found, in perfect order, two boats with oars and masts, and pilots at stem and stern; one boat had a canopy under which was a seated figure. At the head of the coffin was a box containing a model of a granary (of several compartments filled with grain) on the floor of which stands a man holding a basket. Some alabaster jars and about 300 earthenware pots were also found. The three pillars in the tomb were decorated with figures of the deceased wearing a leopard-skin, and all the walls bear inscriptions.

TELL BASTA=BOUBASTIS.—M. NAVILLE and Count d'HULST left for Egypt, in February, to resume and complete, at this site, the excavations of last spring (see JOURNAL, vol. III, pp. 413-18). They recently made the important discovery of a statue of Rameses II, having the striped head-dress painted in various colors, viz., blue, green, and gold. There are also traces of red paint on the lips. Every care will be taken to preserve the colors from injury before the statue is placed in security in the British Museum.—*Athenæum*, March 3.

THE FAYÛM.—*The Colossi.*—W. M. FLINDERS PETRIE writes from Medinet el Fayûm (Jan. 20, 1888): "Readers of Herodotos will remember the strange account which he gives of two pyramids in Lake Moeris, with statues on the tops of them. As such an arrangement would be most improbable architecturally, it is desirable to clear up this account. In hopes of finding something of the XII dynasty, I accordingly began to work on the remains at BIAHAMU, which are usually supposed to be what Herodotos mentions.

"In the few feet of dust and chips over the ruins I found innumerable fragments of the two great colossi, carved in very hard yellow quartzite sandstone, and polished with the utmost brilliancy. The only feature I recovered was a nose, which is 11½ ins. wide. The colossi were therefore about eight times life size, or 35 ft. high, seated. The thrones had the usual figures of the Niles holding plant-stems, and around the bases were some figures. These colossi, 35 ft. high, had bases at least 3 ft. high, and were placed on pedestals which remain about 22 ft. high, making a total height of 60 feet. Each of these pedestals was surrounded by an open

court, with walls sloping up outside nearly as high as the pedestals; hence, from a distance, the colossi would appear as if seated on the tops of pyramids. The age is fixed by a part of an inscription of Amenemhat III, the king who formed, or regulated, Lake Moeris. So Herodotus was correctly informed on this point. [*Cf. London Times*, Feb. 4.]

"M. Grébaut has kindly allowed me to work on his own nomination, in the Fayûm, this season, for the private exploration which I have now undertaken; so my next points of research will be the pyramids of Hawara and Illahun, and the Labyrinth, wherever they may be."—*Academy*, Feb. 4.

PELOUSION.—A. H. SAYCE writes from Cairo (Feb. 3, 1888): "Farama, or Pelusium, is the finest site for the excavator that I have ever seen. It is absolutely untouched; not a Beduin, even, lives within fifteen miles of it, and the Roman pottery and glass with which the mounds are covered have not been disturbed for centuries. The mounds are of very great size, and of oblong shape. Towards the western end is the rectangular enclosure of a temple, nearly as large as that of Luxor. The enclosure, which is composed of burnt brick, is complete on all sides; and the immense masses of *débris* which are heaped up within it must conceal the remains of a temple at once more extensive and more entire than those of the temple of Boubastis. Still further to the west are the granite columns of an old Egyptian shrine, which does not seem to have had any connexion with the great temple, while to the east are the prostrate columns of another temple of Roman age. The ancient harbor is very distinctly marked on the north-eastern side of the enclosure of the great temple, while to the southeast of Farama itself is another mound, the Tel-el-Hirr, which is shown by the remains of which it is composed to have once been a Roman fortress.

"Since my arrival in Cairo I have learned that about 200 cuneiform tablets have been offered for sale here, which are said to have come from Tel-el-Amarna. Some have been bought by the Bûlâq Museum, but the larger number have been purchased by Danninos Pasha. I have not seen a specimen of them, and cannot, therefore, say to what age or class of cuneiform writing they belong. If they really have been discovered in Upper Egypt, their interest will be great."—*Academy*, Feb. 18.

RAMLEH.—Dr. SCHLIEMANN has begun his excavations at Ramleh near the railway-station and close to the sea, in order to discover the remains of the palace of Cleopatra. He has already come upon three steps which he thinks belonged to the palace, but he intends to continue digging to a depth of fourteen metres. The work has been much hindered by the in-flowing water.—*Athenæum*, March 10.

TARRÂNEH = TERENUTHIS.—*Mr. F. L. Griffith's Report.*—The following Report (dated Feb. 6, 1888) has been received from Mr. Griffith, the student attached to the E. E. Fund: "On New Year's day I opened the campaign

on the western edge of the Delta at Tarrāneh. The mounds there, called Kūm abū Billū, are very extensive and of considerable height. They lie on the edge of the desert at a point where the principal road from the Natron Lakes enters the Delta. The date of the surface-rubbish seems to be early Arabic, and late Roman red brick extends as deep as one can conveniently excavate. The cemetery, which is very large and surrounds the town on three sides, is for the most part equally late; but a grave-stone that I found is, perhaps, of the second century A. D. The name of the city was no doubt Terenuthis, surviving still in Tarrāneh. The latter is a small village one mile east of the mounds: and a mile southeast of Tarrāneh, but across the river, is a second mound, also large, but low. On the surface it seems to be moderately late Roman, and, though dug out by the fellahin to water-level, it does not show anything certainly earlier than Roman times. Some large granite columns prove its importance at that date. One of the blocks of granite (reworked) has the name of Rameses II.

Kūm abū Billū.—"Notwithstanding the late date of Kūm abū Billū, I found several early antiquities there. On the late Roman rubbish lay part of an *ushabti* of a man named Raneferab, after Psamtik II. No doubt this has been used as an amulet. To the same category must be attributed a much-worn scarab of Amenhotep III, recording his marriage with Thē, and his lion-hunts. Of more importance is a large block of hard Gebel Ahmar sandstone in the mosque at Tarrāneh, which has the ovals and standard of Necho in the centre. The king is styled friend of Neith of Sais, so far as I could decipher the fragmentary inscription. This block would seem to have been a way-mark for the road to the Wady.

"The Ptolemies, too, seem to have paid especial attention to the place. Strabo mentions Menelaos as the name of a city in the neighborhood; and probably, like the Menelaïte nome south of Alexandria, it was called after the brother of Ptolemy Soter. If we may not compare the name of Abū Billū with Menelaos, it is at any rate significant that a sufficiently handsome temple was built by Soter and Philadelphos at the side of the road to the Wady, just at the crest of the rise to the desert hills. In later times the city of Terenuthis, founded at the edge of the desert, spread along the road until it reached the same point, and the mounds of Kūm abū Billū partly overlap the old temple site.

"The enclosure of this temple, with its chambers and the wall of the foundation, are still partly traceable, but not a single block of stone remains. Several feet above the foundation of this wall is a tile pavement with small marble columns lying upon it. It is evident that we have here the site of successive churches; and the earliest of them was built of stone taken direct from the pagan temple, and built in without any reworking. It is evident

that the town grew very rapidly in height in the Koptic period; and the limestone walls were gradually buried in buildings outside, the pavement of the church being raised without moving the walls, and this contributed to the preservation of the lower courses.

"The inscriptions on the blocks are of no great interest. The cartouches of Ptolemy Soter, who rarely appears in person as a builder, though he reigned twenty years after the death of Alexander IV, and those of Ptolemy Philadelphos recur continually, with dedications to the cow-goddess Hathor, of Mafkal, "the splendor of Bast." I can find no special local reference in any of the inscriptions, and it is clear that no ancient centre of worship existed here. There is a block from the same place bearing the name of the Hemnopolite Thoth, with part of a late cartouche that I cannot identify. I did not work out the site completely, as it was not very promising. I have had all the interesting pieces of sculpture sawn off and taken to Bûlâq, as the only means of saving them from the limekiln. A number of sculptured blocks have been found in former years, and taken to the village or built into *sagiehs*. The remains in the Wady are few. The monasteries have been the chief feature of the place since the introduction of Christianity; and the most flourishing time in the history—both of the Wady and of Terenuthis—was the period of Koptic monasteries."—*Academy*, March 3.

MOROCCO.

During the summer of 1887, M. de la MARTINIÈRE travelled through Morocco, which is still so little known, taking photographs of its ancient monuments. The *first series* represents the ruins on the seaboard at Tandjâ-el-Balia, which appear to belong to the Byzantine period; the bridge of Oued-el-Halk; the Roman aqueduct in the Oued-el-Yhoud valley; and the court of the Kasbah at Tangiers, whose columns are all from ancient buildings. A *second series* reproduces the Ksar-es-Serir, one of the most important mediæval centres of the northern coast. Finally, a *third series* includes views of the neighborhood of El-Araïsh, the ancient *Lixus*, and especially of the ancient monuments of Ksar-Faraôn, the ancient *Volubilis*, including all the details of the triumphal arch and the basilica.—*Revue Critique*, 1888, No. 7.

ASIA.

HINDUSTAN.

It has come to the knowledge of the Government of India that owing to permission unfortunately granted by the local authorities to certain contractors to remove stone for construction purposes on the Rajputana-Malwa

Railway, the extensive ruins of a city of high antiquity and historic interest, comprising several temples covered by earth or forest, have been opened up, and very large quantities of stone removed, thereby causing an irreparable loss.

THE ARCHÆOLOGICAL SURVEY OF INDIA.—The Survey Party of the North-Western Provinces and Oude circle, under Dr. A. FÜHRER and Mr. E. W. SMITH, conducted operations in the districts of *Allahâbâd*, *Bânda* and *Hamîrpur*, during the cold season of 1886–87. Accurate and detailed drawings were made of the ancient Buddhist and Brâhmanical remains at the village of Manknâr, near Bithâ; of the mediaeval Brâhmanical temples and statues in the fort of Garhwâ, near Bhargarh; of several Jaina-images excavated at Kosâm; and of the rock-cave of Gopâla at Prabhâsa on the Jamnâ in *Allahâbâd district*; of the Chandeli temples at Barhâ-Kathura, Râmnagar, Rauli-Golâ, Râsin, and Kâlanjar in *Bânda district*; and of those at Mahobâ and Râhilya in *Hamîrpur district*. Excavations were made in the ruined forts of Bithâ and Kosâm, and near the large *lingam* temple of Nilakantha at Kâlanjar, which yielded, among other relics, a number of ancient Buddhist coins, enamelled beads, and pottery, which have been deposited in the Lucknow Provincial Museum.

The report submitted on this tour treats of the history, architecture, and archaeology of Allahâbâd, Jhûsi, Bithâ, Deoriyâ, Manknâr, Bihar, Garhwâ, Bhargarh, Barhâ-Kathura, Rikhian caves, Kosâm, Prabhâsa, Rithaura, Pûra, Râmnagar, Lokhrî, Rauli-Golâ, Râsin, Bîrpur, Kâlanjar, Mahobâ, and Râhilya. It is accompanied by the texts and translations of 10 Arabic, 24 Persian, and over 250 Sanskrit inscriptions, among which there are 24 new Gupta ones, and over 35 belonging to the sixth and seventh centuries. The most successful event of the season, however, was the entering of the almost inaccessible cave of Gopâla, high up in the face of the hill of Prabhâsa, by means of a wooden crib let down from the overhanging rocks of the hill, with the result of obtaining three inscriptions of the Indo-Scythian period, the oldest of which is dated Vikrama samvat 10 (B. C. 47), besides five Gupta inscriptions.—*Academy*, March 3.

MADRAS (Government of).—*Report of Dr. E. Hultzsch, Epigraphist in the Archæological Survey*, on his epigraphic work from Nov. 21, 1886, to Sept. 20, 1887, from which the following extracts are made.

MADRAS MUSEUM.—Published a Buddhistic Pallava inscription from Amaravati in Sanskrit verse and prose, written on three sides of an octagonal pillar, unique in reading from the bottom, instead of the top.

SEVEN PAGODAS.—Transcripts and translations of the Sanskrit inscriptions of the Pallava dynasty, and attempt to fix the age of some of the Pallava inscriptions at *Mamallapuram*.

TAMIL AND GRANTHA INSCRIPTIONS.—Dr. Hultzsch deciphered 98 inscrip-

tions, collected at Mamallapuram (5), in and near Vellore (38), in and around Virinjipuram (36), at Tirumalai (13), at Padavedu (6); including four unpublished Chora inscriptions from Mamallapuram, two of which enumerate the countries conquered by Rajarajadeva, and give the old name of the so-called Shore temple, *Jalasayanadeva*.

VELLORE TEMPLE.—While the inscriptions at the temple itself are quite modern and do not possess any historical value, the environs of Vellore proved very fertile in important inscriptions. The most interesting of them is an ancient rock-inscription on the top of the Bavaji hill, near Velapadi, a suburb of Vellore. It records that a Pallava chief, Nulamba Tribhuvanadhira, also called Sri-Pallava-Murari gave Velurppadi, which he had taken from Vira-Chora, to a temple on the top of the hill.

VIRINGIPURAM.—A considerable number of ancient stone-inscriptions are built into the pavement of the outer courtyard of the temple: some of them are Chora-inscriptions. At the village of *Kirmuttugur* were four stones with rough sculptures and inscriptions of a Pallava king and a Chora king.

TIRUMALAI.—There are several Chora rock-inscriptions here, the most important of which is engraved in large and handsome characters on a smooth piece of rock on the top of the hill. The inscription furnishes a long list of the countries and kings conquered by Gopa-Parakesarivarman, *alias*, Udaiyar Rajendra-Chora-deva (1023-64 A. D.).

BEZVÁDA.—*Discovery of a structural chaitya or Buddhist temple.*—A. REA, Esq., of the Archæol. Survey, reports (Nov. 28-Dec. 10, 1887) the discovery and excavation of a building near Bezváda, which at first appeared to be a tope, but on further excavation proved to be a *chaitya* or Buddhist temple. It is important as the second example known of a structural *chaitya* (the first being at Sanchi), though numbers of rock-cut *chaityas* exist. Attention was attracted to the site by the fact that in Sewell's *Lists of Antiquities* (vol. I, p. 47) mention is made of "two marble statues of Buddha found on the west side of the western hill" at Bezváda. The result of digging was to find extensive remains of an apsidal-ended structure of brickwork. One straight wall and most of the apse remain complete for over a dozen courses of brickwork above the foundation. Several of the stone slabs of the floor remain in position. There were found, two colossal hands of white marble, one of which had some lines engraved on the palm; some fragments of sculptured white marble; several pieces of ivory; two copper coins; a Roman silver coin; and numerous pieces of pottery. "The colossal hands must have belonged to the image used for worship. The place they were found in indicates this, and it also proves that the *chaitya* had been one of the later examples in use, when the image of Buddha took the place of the *dagoba* for worship."

GUNTUPALLE (near) (Godávari district).—*Excavation of a Stupa.*—A.

REA, Esq., reports (Jan. 8, 1888), "The *stupas* or *dagobas* are over a dozen in number, and they are all of one class. At present, they are simply low, irregular mounds of earth, mixed with bricks, rough stone blocks, with a few circular cut stones lying at different places on their surface, and the whole thickly overgrown with low trees, shrubs and brushwood. I selected one mound for excavation. It measured about 50 ft. in diameter and 12 or 15 ft. in height. I sunk a shaft down the centre and found, close to the surface, an upright pillar or *stambha*, 3 ft. long, with square base, octagonal shaft, and a small circular pin on the top. Digging down for 8 ft. on one side of the well, I came to the exterior wall of a circular-built *dagoba*. The segment so exposed stood directly under the surface *stambha*, and on the north side of the mound. On exposing it, I carried the digging around the curved stonework so as to lay bare the *stupa*. I found it to be a dome, almost hemispherical in outline, about 25 feet in diameter and built in closely-jointed, horizontal courses of masonry; the whole bore traces of having been whitewashed. The upper portion of the dome was ruined, and I found the coursers, or cut stones, lying some inside and others outside the *stupa* itself. This dome stands on a circular, built basement about 7 feet high, with a projection of 12 inches all round. A channel is cut on the upper surface of the projection. Around the exterior I dug a trench, and discovered some interesting white marble sculptures. They are much weatherworn, and their archaic style leads me to think that they are as ancient as, if not anterior to, those discovered at Jaggayyapeta by Dr. Burgess. One is the top of a panel 13½ ins. broad, with 2½ flat surface along the top. Traces of what seem to have been capitals of pilasters appear on each side. In the central recessed panel is the head of a figure in bas-relief, with halo around it, and a garland (?) over on each side. Another is a slab with a standing Buddha, 16 ins. high, with his left arm bent, over which hangs the flowing drapery of his robe. The features are almost obliterated through long exposure to the weather. The image is archaic in character, yet has the graceful pose so characteristic of Buddhist sculpture.

"In the trench excavated around the east exterior side of the *stupa*, a small cylindrical stone casket was found. It is 4½ ins. high, 4½ in exterior diameter, with a small hollow cut in it 2½ ins. in diameter and 1½ deep. Some mortar adheres to the lower portion of the stone, appearing as if it had been fixed upright in some masonry. I believe this to be the relic casket.

"From the extensive nature of the rock-cut *viharas* and the large number of *stupas*, the place must have been one of considerable religious importance in the early centuries of the Christian era. Being so, it could hardly have escaped the attention of the Chinese pilgrims who visited India. It may therefore be interesting to see whether its situation might not correspond

with any of the monasteries described by them, and whose supposed site is at present considered by scholars as doubtfully fixed."

MATHURÂ.—*A new Kanishka inscription.*—Dr. G. BÜHLER writes from Vienna to the *Academy* (March 3): "Of late, Dr. J. Burgess has begun, at my request, fresh excavations in the Kankali Tila at Mathurâ, where Sir A. Cunningham found the important inscriptions from the reigns of the Indo-Scythian kings—Kanishka, Huvishka, and Vāsudeva, published in vol. III of his *Archæological Reports*. To-day I have received from Dr. Burgess, as the first result of his labors, two excellent impressions of a most interesting fragment of an inscription, found on Jan. 30. It is dated in the year 7 of the *mahārāja rājātīrā[ja] Shāhi Kanishka*, and mentions a *vāchaka*, or Jaina preacher, of the *Aryyodeha* (or perhaps *Aryyadeha*) *gana*, and of the *Nāgabhūta kula*. Both these subdivisions of the Jaina monks occur in the longer list of teachers in the *Kalpasūtra*, p. 290 of Dr. Jacobi's translation, where it is stated that *Nāgabhūta* is the first *kula* of the *Uddeha gana*. The inscription proves that this school—which, according to the Jaina tradition, was founded about 200 B. C. in Magadha—flourished at Mathurâ about the end of the first century A. D. I shall publish the inscription in the next number of the *Vienna Oriental Journal*."

MATHURÂ DISTRICT.—*Earthenware Sarcophagi.*—A. REA, Esq., reports (Nov. 9, 1887) his interesting investigations of prehistoric burial-places, in the district of Mathurâ, at Dadampatti, Paravai, Anapanadi, and Kodaikanal, from which we extract the following.

DADAMPATTI.—At Dadampatti, on the eastern outskirts of the village, are traces of about a dozen tombs. Some have been at one time or other partly excavated. Those remaining show a large stone kist underground, formed of stone slabs on the top, sides, and bottom. These were once enclosed by stone circles, but in only one case does this remain, and that, only partially. On removing the slab which covered one of them—which was quite on the surface—the tomb itself was found at over 3 feet below it. It was shaped like the pyriform earthen tombs at Pallāvaram. The semi-globular earthen lid—which had once covered it in, and which would extend up to the stone slab on the surface—was broken, but a few portions of it remained. Arranged around the outside of the rim was a series of chatties, all broken; from the different fragments, there seemed to have been about half a dozen of them: they were all very soft and brittle. The tomb had a bead-moulded rim, and the portions of the cover which remained overlapped it by 10 ins., the edge of the cover-rim was plain without moulding. On clearing the inside, were found a few bones and an iron spear-head.

PARAVAI.—In a similar tomb found at Paravai, the contents were some bones and chatties, and a large number of beads. The beads are very

peculiar and interesting; some are of a reddish semi-transparent material with milky streaks through them. A few are of a greenish hue, and others of white crystal. Most of them have a design in white inlaid work; the lines seem to have been graved on the surface, and the white enamel filled in. These are important, among other respects, in that they resemble beads found at the Seven Pagodas. Another tomb, removed from Paravai to Mathurá and there opened, contained a quantity of human bones, evidently those of a large-sized person. An unusually large number of utensils were also found, fifteen in all.

The last tomb examined here was perfectly complete, with cover in position. The tomb and cover were cracked in different places, but no piece was out of place. The contents might therefore be expected to be complete. The cracks were sufficiently wide to admit of soil finding its way inside along with moisture. This tomb and others since examined perfectly corroborate the theory, that all such tombs as these seemed to have had a lid on the top. On comparing their proportions, it is found that those pyriform tombs at Pallávaram are all broken off nearly midway down their original depth.

ANAPANADI.—The tombs at Anapanadi, (on the southeast outskirts of Mathurá), are all pyriform in shape, and stand in a piece of waste ground to the east of the village. The ground in its extent and general appearance exactly resembles that at Paravai. The tombs appear above the ground singly and in groups. They vary considerably in size. All were of a coarse, red earthenware material, of a very different clay from the finely-grained light material of the enclosed smaller articles. Some few tombs however—always small—which I noticed most particularly at this place, were made of the thin black and red glazed earthenware of the small vessels, about three-sixteenths of an inch thick. This make of tomb was comparatively limited in number; they were evidently used by a superior class, and—from the bones found inside—seemingly for females. One of this latter form of tomb, on examination, was found to contain three nicely-shaped little vessels.

A tomb of the more ordinary earthenware remained with its globular cover complete; it measured 3 feet in diameter and 4 feet deep including the lid. As usual, it was cracked in different places. It stood deep in the ground, with none others appearing on the surface within a considerable distance of it. In this was found one solitary vessel. There were no other fragments, and, as the tomb was complete, none could have previously been taken out. Very different is this from the fifteen articles found in the one from Paravai before mentioned. None of the bones found in any of the tombs were calcined. In another tomb of thick earthenware, were found some bones and three vessels, besides broken fragments of others.

One striking peculiarity in the articles found in these sarcophagi is the surface-glaze, if it might be so called. It might be more properly described as a gloss, as it has little or no hardness or brittleness, but has more the appearance of polish on wood-work or horn. The portions intended to be seen when the vessel was in use, i. e., the top and exterior, are smooth and glazed, while the bottom side has been left rough by the potter, and is unglazed. In one fragment the outside is the usual black and red glaze, while the inside is dull black. A slight portion of the inner upper surface has the glaze, and it has exactly the streaked appearance of having been laid on with a brush or rubbed with some material till polished—almost certainly the latter. One other peculiarity is the difference in color of material in the same vessel. One fragment shows this perfectly—the black, the full thickness at the top, tapering down towards the bottom centre of the inside where its thickness is a mere line. While the red is thickest on the bottom thinning up the outside till it fades into the black at two-thirds of the height. Most of these articles are either round or pointed on the bottom, and if kept upright in the kiln would require a support to steady them.

KODAIKANAL (near).—Megalithic remains.—Palni Hills Kistvaens.—There are quite a number of groups of kistvaens scattered about the sides of the valley west from the Perumal Peak; these have been generally noticed in Mr. Sewell's *Topographical Lists of Antiquities* (vol. 1, p. 288).

A mile to the north is another fine group of kistvaens in very complete preservation. This has also the same peculiarity of a square enclosing basement. The kistvaens stand complete, with their top slabs in their proper positions. Some of these are very large, and one of them must weigh at least five tons. The contents of this, like the others, have, at one time or other, been cleared out, and only a few pieces of broken pottery were found. These were interesting in that they shewed the peculiar black and red glazed colors of the pottery found in the plains near Mathurā. If this does not show that these were used by migratory sections of the tribes who used the others on the plains, it would prove they must have had some connections with them when they used the same kinds of pottery.

There was another group, not far from these, on the opposite side of the valley, and there are many others, probably, scattered about the place.

The square built basement of these kistvaens is a peculiarity in its way, and is but one of the many varieties of megalithic remains pertaining to different parts of the country. Cromlechs and dolmens are found, with slight variations in their character, all the world over; and it is also interesting to find that funeral jars, seemingly such as these we have lately been examining, are found in other countries besides India. Between Carthage and Almeria, the remains of a prehistoric colony have lately been found which are believed to have been inhabited by some unknown race

previous to the Aryans. Numbers of utensils, ornaments, and arms have been found, some without trace of metal, and others in stone, iron, and bronze. Remains of bodies were found buried in *large jars* and in tiled square enclosures. This in Spain; and in Africa also, an aboriginal tribe—in Taveta—have burial customs which are similar in some respects to those in India.

When we find cromlechs, stone circles and other megalithic remains in different parts of the world presenting a wonderful similarity in design and arrangement to each other, it would argue either a wandering primeval tribe in early periods of ancient society, or different races having connection with each other. We find, in India, megalithic and various forms of earthenware receptacles for the dead, which have evidently been used contemporaneously with each other. The probability therefore is, that these earthen tombs may perhaps be as widespread as the megaliths are known to be. Those buried in these ancient Indian jars could only have been placed in a sitting posture, similar to that practised by certain modern burying castes. It is certainly curious to find the same jars and a similar custom at the present day in Africa. A wider investigation might reveal a more widespread practice still prevailing in other countries. [*Indian items communicated by Robert Sewell, Esq.*]

MESOPOTAMIA.

BABYLONIA.—*German Expedition.*—Some time ago, L. Simon donated to the Museum of Berlin the sum of 30,000 marks for exploration in Babylonia. The sum being too small to allow of excavations under a firman, the Museum decided to send out a party merely for purposes of survey and exploration. This party consisted of Messrs. Moritz, Koldewey and L. Meyer. They visited a number of mounds, but especially *Zerghul* and *El-Hibba*, to the study of whose necropoli they mainly confined themselves. The principal result attained has been the certainty that the ancient Babylonians of the fourth millenium *n. c.* cremated their dead. The burning of the bodies took place at distinct cremating-stations and in such a way that a certain spot in the artificial mound was covered with a terracotta jar; the body was laid on it and then covered in with another jar placed over it like a cover. On top were placed the inflammable materials (asphalt and cane) which produced a very strong heat, as the bronze objects were generally reduced to formless lumps. Perhaps the jars had openings to let in the fire, as the bodies are usually completely reduced to ashes. After the cremation, the entire spot was again covered up with a jar, effacing all trace of the operation. Body being placed upon body, a large hill arose in time, that at *Zerghul* being raised 15 met. above the surface of the plain. By the side of these cremating-stations, there were cremating-

houses, for the upper classes, built like the houses for the living. At *El-Hibba* is a town about four kilom. long with narrow streets, each house having a number of rooms, and nearly every room containing burnt bodies. Provision of food is made for the dead. On the floor of each room of the dead are one or more large earthen vases for food, and others for drink, corresponding to the number of deceased. Few objects have been found with the bodies, as they were seldom undisturbed: still there were gold earrings, seal-cylinders, *etc.*; also many earthen vessels, those at "*El-Hibba*" being the latest in date. Both necropoli (at *Zerghul* and at *El-Hibba*) belong to the earliest period of Babylonia, as is shown by a building inscription found at *El-Hibba* which belongs to the early prince Eannadu and is still in the most hieratic characters. This practice of cremation was not, however, confined to the early period, but was also practised at a later time, as was shown by a number of cremating-stations found in various parts of Babylonia.—*Berl. phil. Woch.*, 1888, No. 3.

PALESTINE.

THE AMORITES.—A. H. SAYCE writes from Cairo (Feb. 12), "I find that I forgot to say anything about a curious ethnological fact which I observed during my recent journey. The casts and notes taken by Mr. Petrie last year have shown that the Amorites of the Egyptian monuments were a white-skinned, fair-haired, and blue-eyed population. Now the population of the coast-land from Gaza (or rather Khan-Yûnas) to El-'Arish is predominantly of this character, and stands out in striking contrast to the swarthy Beduin population by which it is surrounded. It is difficult to believe that the Crusaders can have left so permanent a record of their presence in this part of the country; and what makes it probable that the population in question is descended from some early race (like the Kabyles in Algeria) is the resemblance between their features and those of the Amorites as depicted by the Egyptian artists."—*Academy*, Feb. 25.

ASKALON.—C. SCHICK writes to the *Pal. Explor. Fund* (Oct., Jan.) that the Governor has discovered, on a site about in the middle of the ancient town of Askalon, two marble slabs sculptured in high-relief, which appear to have formed pilasters in some ancient structure. The larger and more important of the reliefs is reproduced (in lithog. from a photog.) in the Jan. No. It represents Atlas kneeling and sustaining the globe, on which stands a draped winged [female] figure of life-size: the slab measures about 10 ft. long, 2 ft. broad, 10 ins. thick. The relief on the smaller slab (about 6 ft. long, 2½ broad, 7 ins. thick) represents a life-size winged female figure. In both the winged figures, the face is greatly injured, and the arms are lacking.

JERUSALEM.—In 1862, the Russian Government bought a piece of ground near the church of the Holy Sepulchre: it was surrounded by walls filled with earth to about 15 ft. above the street. During 1887, on removing the earth, ruins of shops were found, and were demolished in order to erect a new building. By this removal was uncovered an ancient pavement (of a forum?) on which the walls of these shops had been erected, apparently in Byzantine times. These shops appear to have formed a part of a market arranged in two streets, other portions of which had been cleared in former excavations.—*Pal. Explor. Fund*, Jan. 1888.

JOPPA.—*Tombs.*—The Russian Archimandrite of Jerusalem recently purchased some land situated one hour to the north of the station of Joppa. Excavations have led to the discovery of a series of tombs with Hebrew and Greek inscriptions. On the tombstones are given the names of the deceased, his father and his family, but no date. *Cohen* and *Levi* occur. A number bear the representation of the seven-branched candlestick, and most of them have, after the name, the word *shalom*. The largest (one met. long and 50 cent. wide) bears the inscription: "Here is the tomb of R. Juda, son of R. Tarphon. May his soul rest in peace; may his memory be blest! Peace!"—*Archives Israelites*, Nov. 24, 1887.

PHœNICIA.

SIDON = SAÏDA.—*Further discovery.*—In November there was found, in a garden not far from the "Cavern of Apollo" (*Magarat-Abloun*), a well leading to several chambers, one of which contained an anthropoid sarcophagus of white marble, still intact. Hamdi Bey had the well filled-in, and proposed to begin regular excavations in February or March.—*Revue Arch.*, 1888, I, p. 91.

ASIA MINOR.

KYME.—*Augusteum and its sculptures.*—In November, near the place (next to the hut of a man named Perganli) where M. Sol. Reinach excavated in 1881, some very interesting sculptures have come to light. A wall was found encircling a hill, and within its circuit were the sculptures. A marble basrelief has, on a background painted dark red, two Erotes and a garland, all covered with bright colors. The rest of the sculptures are in the round: (1) a female bust of the "Juno" type, of natural size, with a diadem, wavy hair painted red; (2) a male bust (Tiberius, according to Baltazzi Effendi) of natural size, veiled as a pontif, the front of Paros marble and the back of bluish marble; (3) a male head of Paros marble, perfectly preserved and of fine style, with short hair; (4) a male bust, of natural size, like the preceding, with the head surrounded by a fillet colored purple and filled with holes, curly hair, and of the "Apollo" type; (5) a draped female

statue, finely preserved, three quarters life-size, with the head of a separate piece of Paros marble, and traces of red on the chiton and gilt on the himation; (6) fragments of the statue of a Roman Emperor.

M. Reinach thinks that these busts and statues of Roman Emperors and Empresses may be from an *Augusteum* built here by Tiberius, analogous to that found at Otricoli in 1777, and is confirmed in his hypothesis by an inscription of Tiberius dated 34/35 A. D., four years after the Pozzuoli inscription commemorating the restoration of the Asiatic cities by Tiberius.—*Revue Arch.*, 1888, I, p. 85.

PERGAMON (neighborhood of).—At a recent meeting of the Archaeological Society of Berlin (Dec. 9) C. Schuchardt gave some details regarding the neighborhood of Pergamon studied by him in 1886. At the foot of the Karadagh, between Atarneus and Pitane, he found the site of Kanai, surrounded by watch-towers and connected with Pergamon by a line of small forts used as signal stations. Analogous towers are to be found at Lesbos and Kolophon. Several of these forts retain marks of the installation and life of small isolated mountain garrisons: the tower is placed in the centre of a plateau, with a cistern on one side and a small nekropolis on the other, while lower down are traces of small houses built on a uniform plan.—*Berl. phil. Woch.*, 1888, No. 3.

KYPROS.

PROPOSED EXCAVATIONS.—The Society for the Promotion of Hellenic Studies has issued a preliminary program concerning some proposed excavations in Kypros. The Society itself contributes £ 150, and the Managing Committee of the British School at Athens contribute the like sum on condition that the control of the exploration be in the hands of the Director of the School, Mr. Ernest A. Gardner, and that those who take part in the work enroll themselves as students of the School. Cambridge and Oxford contribute money, and send out, respectively, Mr. M. R. James and Mr. D. G. Hogarth, both names already known in archaeology. Zoölogy and natural science generally are entrusted to Dr. Guilmard, and an architect, Mr. R. Elsey Smith, is to be sent out at the joint cost of the Royal Institute of British Architects and the British School at Athens. The Committee wisely refrain from stating precisely with what sites they intend to begin operations: ample discretion is to be left to Mr. Gardner when he reaches the field of action. Nothing seems wanting but money (subscriptions to Mr. Walter Leaf, Hon. Treas., Old Change, London, E. C.).—*Builder*, Dec. 31; *Class. Review*, I, 10.

Professor A. H. SAYCE writes from Larnaka (Jan. 10, 1888), "From the excavator's point of view, I must confess that my visit to Kypros has been a disappointment to me. Excavations at *Old Paphos* (Kuklia), im-

portant as they would be for the history of Phoinikian art and the worship of Aphroditê, would, I fear, be too costly to be undertaken except by a government; and at places like *Neo-Paphos*, *Soli*, and *Salamis*, the relics of antiquity seem too modern to be worth the trouble of disinterring. Even the tumuli in the vicinity of *Salamis*, so far as I was able to examine them, have all been opened, apparently in the Roman period. One of them, on the road from *Famagusta* to *Larnaka*, has been built round a core of cut stones. It is probable that the best sites for the excavator are to be found in the *Karpas Promontory*—at all events, these have hitherto escaped the spade of the treasure-hunter or antiquary, and the immense caves which exist in their neighborhood are full of promise to a disciple of Professor *Boyd Dawkins*.

"I may note here that *Dr. Richter* has some rude clay-cylinders which seem to me to be imitations, not of *Babylonian* cylinders, but of *Egyptian* cylinders of the *xii* dynasty; and that *Col. Warren* possesses five remarkable *Babylonian* cylinders with cuneiform inscriptions (which at present I am unable to read) which are said to come from *Ammogeti*, in the neighborhood of *Old Paphos*. It may be hoped that *Mr. Ernest Gardner*, who is just now digging on the site of an old *Phoinikian* fortress at *Liondari*, near *Nikosia*, on behalf of the *Hellenic Society*, may find it possible to undertake some excavations also at *Paraskevi*."—*Academy*, Feb. 11.

KOURION.—"The excavations undertaken at *Kourion* by the *Vicomte de Castillon*, the *French consul* at *Larnaka*, on behalf of the *Louvre*, in order to test *Gen. di Cesnola's* account of his discovery of a temple-treasure there, show what may be discovered even on sites which have been frequently worked. Among the objects found by him is a beautiful *Hellenic* vase of the best epoch, with the words *Μεγάλης καλός* scratched upon it. Within it was placed a second vase, and in this a bronze helmet. Many articles of gold were found at the same time, as well as specimens of *Phoinikian* glass. Among the jewellery is a gold ring, the *chaton* of which has been engraved by *Phoinikian* artists with the representation of a ship. The prow and stern of the ship terminate in the head of *Anubis*, and upon the deck are figures in a semi-*Egyptian* style, one of them being that of a seated deity."—*A. H. SAYCE*, *Academy*, Feb. 11.

PAPHOS.—*Mr. ERNEST A. GARDNER* writes from *Kypros* (Feb. 18) to the *Athenæum* (March 10), that, after working a fortnight on the site of ancient *Paphos*, the conclusion is that it will repay a thorough excavation. He says: "we have as yet no answer from the Government in reply to our request for permission to dig upon more than one site, and we are therefore compelled to devote our attention entirely to *Paphos*. Here, however, we have found enough work to keep us employed in the meanwhile. Upon the site of the great temple itself we have made numerous trenches, descend-

ing for the most part to the solid rock. We have thus found various pavements and walls; some of the latter are of deep foundation and good construction, and will, I trust, enable us to reconstruct, at least in part, the plan of the temple. We hope next week to begin clearing the site completely of earth; this is not an impossible task, as the foundations are not in many places at any considerable depth below the surface. The inscriptions we have found are interesting in themselves, and seem to promise a rich harvest as our work proceeds. We have already unearthed eleven Greek and two Kypriote inscriptions; to these may be added three others which were lying on the surface, but apparently had never before been read. In the village have been found about twenty more, a few of which have been already published, but in almost all cases with so much inaccuracy that a new publication is necessary. Most of the inscriptions we have dug out have been on the bases of statues of the Ptolemaic period, and throw some light upon the history of that time. One was on the pedestal of the statue erected by the Paphians to Tiberius in gratitude for his rebuilding their temple. Another is a letter of Antiochos to Ptolemy Alexander concerning certain Seleucians who had done a service to his father. The most interesting, perhaps, is a record of the contributors to the *Ἐλαιοχρηστίαν*. Two statues have been found, one small and rude in style, the other in poor condition and of a late period. Thus there is some promise of a tangible return for our expenditure as well as of an increase in our knowledge of the site.

"We have meanwhile been trying various tomb-sites in the neighborhood. In this work we have received great help from our chief overseer, Georghi Ali Georghi, whose local knowledge and sagacity are extraordinary. We have found many graves, of various periods, but unfortunately a large number had been rifled in Roman times. Most of the pottery is of the Kypriote type, ornamented with concentric rings. But we do not yet seem to have found the place of the earlier tombs, though one 'Mycenæ' vase seemed to point to their proximity. We have found one stele with rough volutes, another with an ornament in blue and red paint and a Kypriote inscription."

PARASKEVI.—"The museums and collections of Kypros have impressed me with the belief that, so far as tombs are concerned, the most interesting results are likely to be obtained by excavations in the prehistoric nekropolis of Paraskevi, close to Nikosia. This has been worked for many years, but many of the tombs contained in it are still unopened. Most of the Kypriote cylinders sold in Nikosia probably come from it. On one of them, now in the Kypros Museum, I noticed the figure of a double-headed eagle, like that on the Hittite monuments of Asia Minor. A Babylonian cylinder, with two lines of cuneiform inscription, has recently been found in one of the tombs.

"The pottery of Paraskevi is for the most part pre-Phoinikian, some of it being incised and the lines filled with white; some of it being ornamented with reliefs, which frequently assume the figure of a snake. In one instance, I observed the figures of deer delineated in precisely the same way as on cylinders of the Kypriote class.

SOLIOS (near).—"Karavostasi adjoins the site of Soli. Here I sought in vain for any traces of an age earlier than that of the Romans; but, in the Simniti Valley about two miles to the west, Dr. Richter has found pottery of the Mykenaian type."—A. H. SAYCE, *Academy*, Feb. 11.

EUROPE.

GREECE.

THE IONIC CAPITAL.—The forty-seventh program of the Winckelmann Festival, held annually by the Archæological Society at Berlin, has for its subject "The Ionic capital." Dr. Puchstein, in the preface to his monograph, says distinctly that his object is not to discover the origin of the form, but to classify existing specimens in certain local and chronological groups. The greater number of his examples are from Oriental architecture, decoration, and pictorial work, as is natural from the fact that his archæological labors have been in the East. Among the illustrations are some from Assyrian reliefs, Phoinikian bronze bowls, an aedícula from Boghaz Keui with very primitive Ionic columns, *etc.*—*BUILDER*, Jan. 7.

The attention called to the origin of the Ionic capital by Mr. J. T. Clarke (*JOURNAL*, II, 1-20) has appeared to produce a number of interesting monographs on the subject, among which is that by Mr. Goodyear (*JOURNAL*, III, 271-302). In the present number of this *Journal* there appears a paper by Mr. Trowbridge, a member of the American School at Athens, on Early Ionic capitals recently found on the Akropolis.

AMORGOS (Island of).—The French School at Athens, having obtained permission from the Greek Government to make excavations in Amorgos, have already commenced operations, and their labors have been so far crowned by the discovery of the steps of some ancient public building, which cannot yet be definitely specified. A pretty long inscription has also been found in the same place, the contents of which have not yet been made public.—*Athenæum*, March 17.

ATHENS.—**EXCAVATIONS ON THE AKROPOLIS.**—The results of the latest excavations from an architectural standpoint are given as follows by Kawerau in the *Deutsche Bauzeitung*, 1888, No. 1. Setting aside the old Athena temple and the small sanctuary consisting of a cella and vestibule against the north wall which were discovered some time ago, the most important

ruins are those of an ancient Royal palace northeast of the Erechtheion. Starting at the Propylaia and skirting the N. wall, we come across the ruins of an edifice divided into three rooms of unequal size, leaning against the retaining wall. It is proved by inscriptions to be the Chalkotheke or Treasure-house, whose site had been sought in the opposite corner of the Akropolis. It consists of a narrow portico facing the south, and behind this two chambers. The foundations are made of blocks of *poros* stone, and Dr. Dörpfeld assigns them to Kimon's time. From the plan it will be seen that had the north hall of the Propylaia been carried out according to the project of Mnesikles, part of the Treasure-house must have been pulled down. The few remains that exist of the upper outer walls on the N. and E. show a later construction than that of the foundations, being of *poros* blocks which are smoothed and edged on the interior. At a considerable depth below this construction were found the surrounding walls of a cistern, partly cut out of the native rock, partly built up of blocks of *poros*, of which several rows remained in place. It consisted of at least two chambers, the W. part of the second having been destroyed by later constructions. The cistern was calculated to supply the entire settlement with water even in time of siege and drought, for it was placed at the lowest point and received the entire water-fall of the western half of the Akropolis, and the chambers themselves are large, the remaining measuring 8 by 9 met. The period may be that of Peisistratos. The canal, marked with a heavy dotted line on the plan is of later date but earlier than the Mnesiklean Propylaia: it is built of large squared *poros* stone, and starts by the west wall of the Chalkotheke and follows the line of the outer Akropolis-wall under the north wing of the Propylaia and breaks through the wall at the N. W.

Following the North wall in an easterly direction we come to the remains of very ancient walls built of bricks and earth, somewhat thin and carelessly built: others are more carefully built and with larger stones, and evidently belong to some public constructions. Especially to be noticed, in the latter category, is a tower-like, squarish construction of large Cyclopean blocks, which has walls more than a meter thick. All these ruins rise, at most, 1.50 met. above the surface of the rock. Such remains continue up to the Erechtheion.

Archaic Royal palace.—To the east of the Erechtheion were found a series of very early walls of quarried stone and earth evidently belonging to a large structure: from the strength and size of the blocks, and the peculiarity of ground-plan, this structure was evidently a palace, to which a flight of steps led up. These steps are built of immense blocks of stone and are similar to those at Tiryns: they are placed in a cleft bounded on one side by the steep northern declivity, on the other by an immense rock:

eight of these steps remain. The portions of the palace hitherto discovered, being comparatively low and towards the edge of the Akropolis, are certainly not the main part of the building; other remains show that it extended further to the E. and S. towards the top of the rock. It appears certain, from the analogy of other early palaces, that here also the Royal palace with its dependencies occupied the entire summit of the Akropolis: this is supported by remnants of walls near the Stoa. Proceeding east, we come across a Pelasgic wall built of immense blocks, which probably encircled an upper terrace. Here, as at Tiryns and Mykenai, the different portions of the palace, following the natural lay of the land, were placed on different levels. The depth of rubbish at the summit was so slight that almost nothing of this main part of the building has escaped. Several large rooms, however, were found in the lower portion, one measuring about 6.05 by 4.05 met.: also corridors and a tower-like room. The outer walls, indicated on the plan by a delicate outer parallel line, show a façade carefully built of large unworked blocks, as in the outer Pelasgic walls of Tiryns and Mykenai, except that in Athens flat stones are more often employed with rounded or polygonal blocks. The walls at present are 1.50 met. above the rock at their highest point. Of objects of any sort belonging to the palace, with the exception of unburnt bricks, only one of importance has been found. It is a stone cubical base for a wooden column, like those of Tiryns. On the east side, within the wall of Kimon, a part of the Pelasgic wall has come to light, and near it the remains of an important construction connected with the early fortifications.—*Berl. phil. Woch.*, 1888, Nos. 4, 5.

For a comparative study of this early palace with those of Tiryns and Mykenai, see a paper in the *Berl. phil. Wochenschrift*, March 3. The altar of Zeus Herkeios of the palace is placed in the Pandroseion of the Erechtheion, and thus a starting point is obtained for the entire arrangement, and the main and side entrances are identified—the main approach being on the west, not, as at Tiryns, on the east.

The temple of Roma and Augustus is 25 met. east of the Parthenon exactly on its axis, and is a small circular building of white marble, surrounded by nine Ionic columns, with a diameter not above seven met. It was in its foundations that new fragments of the second archaic poros gable-sculptures were found, representing the contests of Herakles.—*Berl. phil. Woch.*, 1887, No. 49.

Archaic pediment-sculptures.—In digging below the foundations of the temple dedicated to Roma, the Graces and the Demos (Roma and Augustus), the discovery of which is noticed above, some remarkable fragments of archaic sculpture came to light. It was instantly recognized that they belong to one of the two very curious and interesting pediment compositions—the earliest extant—representing Herakles engaged in contests

with the Hydra and with Triton, which were discovered two years ago and published in the *Mith. d. d. arch. Inst.* (1885, 4; 1886, 1): they are executed in poros-stone in the very lowest relief. The new fragments are reported to belong to the relief which represents the contest of Herakles with Triton.—*Berl. phil. Woch.*, 1888, No. 1; *Builder*, Jan. 7.

Archaic Statuary.—In the excavations at the southeast corner of the Parthenon, near the Akropolis Museum, have been found two archaic heads, smaller than nature, the one in marble, the other in terracotta, and a marble figure in form of a *zoanon*, with a kithara in its right hand.

Further digging led to a discovery of the highest importance. At a depth of about four met. from the present level, was found the bearded head of a man of heroic size, carved in poros-stone, well preserved, and retaining a covering of rich and brilliant coloring. The hair and beard are painted blue and the face red. What is remarkable, however, is that the pupils of the eyes are not only painted in, but also delineated with the chisel. This head, which forms one of the most ancient sculptures ever found upon the Akropolis, will attract considerable attention both from the style of workmanship and the material of which it is made. It appears to be the head of a Triton, the rest of the body, in the form of a serpent ending in the tail of a fish, having been found a few days before near the same place. Later, was discovered a marble relief representing the head of a horse, still preserving the bronze bit in its mouth; and a fragment of an archaic vase with a border in relief representing a chariot race.—*Athenæum*, March 3, 10, 17.

The recent finding of a marble head quite analogous to that of the Apollon of the west pediment of Olympia, added to the evidence of the bronze head of the same style discovered here in 1886, favors the assertion of Pausanias, that the pediment is the work of an Attic artist. Three pieces of sculpture of calcareous tufa have been found that are anterior to any of the archaic marble sculptures excavated during the last two years.—*Revue Arch.*, 1888, I, p. 63.

THE ANCIENT ROAD FROM ATHENS TO THE ACADEMY.—Within the last few days the ancient road leading from Athens to the Academy of Plato has been discovered, during some excavations made near the silk-factory. Although not paved, the road is well preserved, presents a hard surface, and is quite intact. It is being laid bare on both sides. The excavation of the road has resulted further in the discovery of several lekythoi with borders on a white ground, belonging to the archaic epoch; also a terracotta disc on which is represented a man with wings on both shoulders and feet, probably a Hermes.—*Athenæum*, March 17.

NEW MUSEUMS.—It has become necessary to build a second Museum on the Akropolis, on account of the multiplicity of recent discoveries: in it

are to be stored all the smaller and, in general, the less important antiquities. The Minister of Public Instruction at Athens will present shortly to the Greek Chamber a Bill for the foundation of a museum of casts to be erected in the rear of the Central Museum on the road to Patissia. The casts will embrace copies of all the chief works of ancient art contained in foreign museums.—*Athenæum*, Jan. 21; *Builder*, Jan. 28.

CATALOGUE OF THE CENTRAL MUSEUM.—M. KABBADIAS has recently published a catalogue of the antiquities in the Central Museum, in Greek, under the title: ΚΑΤΑΛΟΓΟΣ ΤΟΥ ΚΕΝΤΡΙΚΟΥ ΑΡΧΑΙΟΛΟΓΙΚΟΥ ΜΟΥΣΕΙΟΥ ὑπὸ Π. Καββαδία, γενικοῦ ἐφόρου τῶν ἀρχαιοτήτων. 1886–87. Of the three parts, only the first two have yet come to hand: these include a description of 170 statues or basreliefs belonging to archaic art, to the developed period, or to the Alexandrian epoch. The order is chronological, and every description is followed by bibliographical indications. At the close there is to be a concordance with the numbers of the catalogues of MM. Kekule, Heydemann and Sybel. The archaic series is extremely important, including 54 pieces, of which 13 are from the excavations of the temple of Apollon Ptoos, 6 from Delos, 5 from Eleusis.—*Revue Critique*, 1887, No. 49.

DELPHI.—*Investigation of the site*.—In prevision of the impending excavations by the French School, a German, M. Pomtow, has, with the assistance of an architect, made a survey of the site, and has communicated the results to the Archæological Institute of Berlin (July, 1887). His main object was to draw up an exact plan of the village of Kastri, in order to note on it any discoveries: this plan, which contains all the houses, is drawn on a scale of 1/750: the famous polygonal wall has been drawn on a scale of 1/50 with the exact position of each of the 600 inscriptions that have been read there by the German and French archæologists. The western nekropolis has been found, and a boustrophedon inscription in the Selinous alphabet (end vi cent.). It was impossible to draw up a plan of the entire ancient city, but a complete study was made of the sacred enclosure, whose peribolos (the *Helleniko* wall) is in great part preserved on the north and west. In the centre is the terrace of the temple supported by a very early polygonal wall: only the eastern end was known along a distance of 77 metres; the west end has been found, about 75 met. further. About two metres more of the E. section were uncovered and some inedited inscriptions copied. The crepidoma of the temple is visible on the S. side, and a trench dug to a depth of three met. did not reach its foundations. Parallel walls were built from E. to W. to uphold the earth, and between them were subterranean chambers (*δωμάτια ὑπόγαια*) whose roofs formed the floor of the temple. The only visible remains of the building are about thirty drums of columns of Parnassos stone and fifteen drums of marble Ionic columns. Plans were drawn up of the theatre and the stadium. The recent discovery

of the Stoa of the Athenians in a spot quite different from what was expected had made it probable that the views hitherto held regarding the arrangement of the buildings within the *ἱερόν* were erroneous. It was thought that the Sacred Way led direct from the fountain Kastalia to the eastern door of the temple, and that the treasuries and ex-votos were picturesquely arranged on either side. It is now proved that the entrance was on the south, and that the road, taking a *détour* along the S. E. corner of the wall, rose towards the temple on the east. This route is shown in the Pythic procession on a basrelief published by Welcker (*Alte Denkmäler*, II, pl. II, 3.) which contains all the topographical details necessary for the identification. Besides this, the direction of the Sacred Way towards the fountain Kastalia has been identified by a number of bases, each at a distance of twenty paces from the other, which probably served as supports for statues. The point of departure of Pausanias, in his description, was a dedication in five distichs: this has been found inscribed on a base, at the steps of the S. E. corner of the peribolos.—*Berl. phil. Woch.*, 1887, No. 42.

ELEUSIS.—*Newly discovered work by Praxiteles.*—A paper by Benndorf, published in the *Anzeiger der phil. hist. Classe* of Wien (Nov. 16, 1887, No. 25) calls attention to the probable existence of a hitherto unsuspected work of Praxiteles. During the excavations at Eleusis in 1885, was found a head somewhat over life-size, in Parian marble. The type corresponds exactly with the so-called Vergil heads in Mantova and on the Capitol, and these are evidently ancient copies of some famous original, which could not have been a portrait, but from its character rather a god or hero. An inscription of the fifth century tells us that among the other deities honored at Eleusis was Euboulos or Eubouleus; and close by the marble head was found a dedicatory inscription to this personage, whose name is only another synonym for Haides. According to the traditions of Eleusis, he was a herdsman who figured in the scene where Kora was carried off by Haides. So that there may well have been at Eleusis a cult-statue of Eubouleus as a demigod. In the Vatican there has long been known to exist a headless term with the inscription Εὐβουλὸς Πραξιτέλους. This was always considered to be the signature of an artist, son of some unknown Praxiteles; but there is no doubt now that this interpretation is erroneous, and that the missing head of the term was rather a copy of the Eubouleus by the great Praxiteles. The Eleusis head presents close analogies to the Hermes of Praxiteles, in the moulding of the forehead, the treatment of the hair, and in the general individuality and inventiveness of style. In form it most resembles the Ganymede of Leochares. On the whole it seems the outcome of the more mature age, as the Hermes was of the youth, of the artist.—*Class. Review*, Feb.; *Revue Arch.*, 1888, I, pp. 64–66 (SAL. REINACH); *Gazette des Beaux-Arts*, 1888, I, 69.

Archaic relief.—A man named Joannes Sakellarios, in digging in a field near the nekropolis and the road leading to Thebes, found a basrelief representing a warrior, of natural size, giving his helmet to a small attendant. The style is said to be archaic.—*Revue Arch.*, 1888, 1, p. 66.

ELIS—In a village of ancient Elis a group of marble figures has been unearthed, the subject being a lioness tearing to pieces a ram. The work is attributed to the Hellenic period, and the execution is excellent. The inspector of antiquities stationed at Olympia has been dispatched to this village of Varvasseria to make excavations on the spot.—*Athenæum*, March 3.

KEPHISIA.—The American School at Athens have obtained permission from the Greek Government to make excavations at Kephisia, where the discovery of a long-lost temple may be their reward.—*Athenæum*, March 3.

KERIGO = KYTHERA.—*Dr. Schliemann's Explorations.*—The discovery by Dr. Schliemann of the early temple of Aphrodite at Kythera has been mentioned (vol. III, p. 443). A report on the remains of the temple has been sent by the discoverer to the Berlin Society of Anthropology. A fuller description, with plan and sketches, will appear in the *Mittheilungen* of the German Archæological Institute at Athens. Meanwhile, we are enabled to state that the site of the old temple is identical with that of the church of the holy Kosmas. It is situated nearly in the centre of the enclosure-walls of the old town of Kythera; and it appears that the stones of the ancient sanctuary almost sufficed for the erection of the church. The temple was a closed structure made of tuff-stone, with two rows of Doric columns, four on each side, of extremely archaic style. They are all still preserved in the church, with their capitals and ornaments; but only two of them, as well as the base of a column, are now *in situ*. The columns, also, are of tuff-stone.

This temple was the earliest one dedicated to Aphrodite Ourania, whose worship here seems to have had a Phoinikian origin, and Pausanias speaks of her archaic statue, then existing, as being in complete armor.

On a hill-top in the neighborhood, which is about thirty metres higher, there are remains of Cyclopean fortifications. Dr. Schliemann thinks they cannot be older than the seventh century B. C., seeing that he did not find there any potsherds for which a higher age could be attributed. All former excavators have sought for the temple of Aphrodite on the lower terraces of the hill-range, but in vain. When digging there, Dr. Schliemann laid bare a mass of large building-stones; but these appear to belong to a wall-tower of the Macedonian period. The great enclosure-wall of the town, which is formed of the same material and is in the same architectural style, evidently dates from that epoch. For a long time this wall has been used by the inhabitants as a convenient source of building-material; nevertheless, there are still considerable remains in several places.

Dr. Schliemann also made excavations in the old harbor-town of the island, at Skandeia, but without finding anything of interest. There are nowhere else any artificial mounds to be seen in Kerigo.—*Academy*, Jan. 21.

KOS (Island of).—*Temple of Asklepios*.—On this island have accidentally been found some sculptured remains which point plainly to the site of the once famous temple of Asklepios. They are an altar, a marble-snake (the sacred attribute of the god) and the horn of Amaltheia. It is known, from various sources, that this temple was only third in importance to those of Epidauros and Athens, that it contained the painting of Antigonos by Apelles and the Aphrodite Anadyomene, and was full of very early votive offerings and inscriptions (Strabo, xiv. 2 seq.).—*Berl. phil. Woch.*, 1887, No. 50; *Buider*. Dec. 24.

MANTINEIA.—*Discoveries by the French School*.—The following additional details supplement the account of the excavations at Mantinea already given, vol. III, p. 443. The city, now deserted, was for a long time occupied by the Byzantines, and several churches were built on the site of ancient monuments. In their ruins were found many pieces of architecture, sculptures, and some thirty inscriptions. Two axes of polished stone were found. The relief of the pedestal representing Apollon and Marsyas and the Muses, though not attributed to Praxiteles who executed the group of Leto and her children which it supported, is supposed to belong to his School.

MYKENAI.—*Prehistoric palace*.—Mr. Adler, who has recently visited Mykenai, has given to the archaeological society of Berlin some details regarding the discovery of the palace. In the S. E. angle of the lower akropolis there were found houses arranged in terraces with stairs, corridors, small courts, and storehouses. Twenty-six metres higher, the ruins of the palace were uncovered. A stone staircase led to the court, the eastern extremity of which is bounded by the Megaron, similar to that of Tiryns. Inside is a circular fireplace, with two steps, whose border is decorated with a frieze; the decoration belonging to the same style as that of the Mykenian vases. To the west of the Megaron, a second staircase, almost entirely of wood, led, according to Mr. Adler, to an upper story, now fallen in, above which at a later period was built a long Doric peripteros, fragments of which have been found. Thus, at Mykenai, as at Tiryns, a temple rose on the ruins of the old royal dwelling.—*Revue Arch.*, 1888, I, p. 67.

OROPUS.—*Stoa*.—The Stoa was completely excavated in 1887. It is 110 met. long, lies near the theatre, and was used for the convenience of the theatre-goers. The main front of the stoa was on one of the long sides, having about 50 Doric columns. A long inscription, singularly enough, was placed in the metopes. The three other sides are formed of finely-built, well-preserved walls constructed, below, of large slabs, above, of small mortar-bound stones, crowned by a simpler cornice than the front,

and they have a colored strip of which some traces of red and green remain. In the interior, marble seats were placed around the walls, nearly all of which are still in place, some of them having inscriptions of the dedicator or owner. It was divided across into three parts: a central hall (divided lengthwise, in two, by Ionic columns) and two smaller wings separated from it by a small *poros* wall, through the middle of which a doorway was cut.—*Berl. phil. Woch.*, 1888, No. 9.

PEIRAIEUS.—*Phœnicio-Greek inscription*.—An important Phœnician inscription has recently been found at the Peiraieus, near the spot where others had previously come to light, and has been purchased for the Louvre. It is transcribed and translated as follows by M. Renan in the *Revue Archéologique* (Jan.-Feb., 1888, p. 5):

1 בים לל למרזח בשת > ללל לעם צדן תם בר צדנים בן אספת לעטר
2 אית שמעבעל בן מנן איש נשא הגו על בתאלם ועל מבנת חצר בתאלם
3 עטרת חרץ בדרכנם ל למחת כ בן אית חצר בתאלם ופעל אית כל
4 איש עלתו משרת אית רעת ז לכתב האדמם איש נשאם לן על בת
5 אלם עלת מצבת חרץ ויטנאי בערפת בתאלם ען אשלכנת גו
6 ערב עלת מצבת ז ישאן בכסף אלם בעלצדן דרכמנם ל למחת
7 לכן ידע הצדנים כידע הגו לשלם חלפת אית אדמם איש פעל
8 משרת את פן גו

"On the fourth day (of the month of mirzah), of the fifteenth year (of the era) of the people of Sidon: *It has pleased*¹ the Sidonians | to crown Semabaal, son of Magon, who has been *nasi* of the community for the temple and for the construction of the portico of the temple, | with a crown of gold (of the weight) of twenty *legal* drachmas, because he built the portico of the temple and did all | that was in his power on this subject; to write the names of the men who have been our *nasi* for the | temple on a gold stele, which shall be erected in the portico of the temple | this stele, shall take twenty *legal* drachmas from the money (of the temple) of the god Baalsidon; in order | that the Sidonians may know, as the community knows, in order of succession (the names of) the men who have filled | offices before the community." The Greek words of the inscription are: τὸ κοινὸν τῶν Σιδωνίων Διοικετὴν Σιδωνίων. The era of Sidon begins 111 B. C., and this would date the inscription in 96 B. C., which is also the date indicated by the form of the Greek letters.

Excavations.—The French School has resumed its excavations at the Peiraieus: the two towers of Eëtioneia, an interesting example of military architecture, are being freed. Some archaic pottery with inscriptions has been found, also two tombs cut in the rock, one of which contained a

¹ Words in italics are doubtful.

lekkythos and an *alabastron*, the other two clay *kalpides*.—*Revue Arch.* 1888, I, p. 64.

Inscribed herma.—In a house of the Νοταρᾶ street has been found a herma with the following inscription: Ἡ ἐξ Ἀρείου Πάγον | βουλὴ Κάλλιστον | Ἀσκληπιάδου Ἀλωπεκῆθεν, αἰτη-|σαμένον τοῦ πατρὸς αὐτοῦ Ἀσκλη|πιάδου τοῦ Διονυ|σοδώρου Ἀλωπεκῆ|θεν. As other hermæ and inscriptions have been found on this site, it is probable that a public building or square existed here.—*Berl. phil. Woch.*, 1888, No. 1.

THESPIAI (near Thebes).—*Temple of the Kabeiroi*.—Last December, Dr. Kabbadias heard that some small cows bearing the inscription ἱερὸν Καβείρων were being sold at Athens, having been found by workmen digging near Ampelosalesi. He and Dr. Dörpfeld went to reconnoitre, and decided that a thorough excavation of the site should be undertaken at the expense of the German Archaeological Institute. Work was at once begun, and was brought to a close Jan. 17, by winter weather, but the result has been most satisfactory. The walls of the temple can now be traced, and two altars and a doorway, as well as fragments of several columns, have come to light. Also, they found a trench with the bones of animals that had been sacrificed. Among the minor objects are a great quantity of votive offerings, some of them bearing inscriptions: 500 are in terracotta, 74 in bronze, 1 in gilt bronze, 83 in lead. Besides the large number of votive animals, many heads of cattle, and one of a horse, there were copper and silver coins; fragments of vases and statues; terracotta statuettes, one of them preserving traces of painting in colors; a relief of a woman and a bearded man; a kantharos with the inscription: Σμικρὸς ἀνέθηκε | Καβείρων καὶ παιδί; a large seat with the inscription: Φρήνιχος Ῥέγγωνος Καβείρων καὶ παιδί. On the vase with the Kabir and his son, the former has the inscription, Κάβειρος: the παῖς stands by a krater, while on the other side is a man (Πρατόλαος) with a woman (Κράτεια) on the left, by whom is a man-satyr (Μίρος). The vase is of the best period.

The ἱερὸν lies in a hollow between two hills. Of the temple itself only the foundations remain: it consisted of a pronaos and sekos, and in the place of the opisthodomos was the place of offerings. Three periods are evident: the earliest, the seventh century, the second, that of the Persian wars, the third, the Macedonian period. The temple is 224 met. long and 7 wide. Pausanias (IX. 25. 5) gives an account of this temple of the Kabeiroi.—*Berl. phil. Woch.*, 1888, Nos. 3, 5, 6, 10; *Athenæum*, Feb. 4. *Cf. Builder*, Jan. 28, Feb. 18; *Class. Review*, March; *Revue Arch.*, 1888, I, p. 72.

KRETE.

The Greek Syllogos of Candia, the capitol of Kreta, will publish towards the end of February an illustrated catalogue of the chief objects of archæ-

ological interest contained in their museum. Amongst the objects illustrated will be those recently discovered in the grotto of the Idæan Zeus and in the temple of Apollon at Gortyna.

A new edition of the celebrated inscription discovered by Halbherr and Fabricius at Gortyna is being prepared by Prof. Perdikaris, of Candia, in Greek, while a new Italian edition, illustrated by a large plate of the whole monument, is being prepared by Prof. Comparetti, of Firenze. Both texts will be corrected in accordance with the latest copies made by Dr. Halbherr.—*Athenæum*, Jan. 21.

GORTYNA.—As to the circular building which first made Dr. Halbherr's name known in connection with Krete, he has now made two new discoveries in it of the greatest interest. The first discovery is the fact that each stone of the great code-inscription is numbered and otherwise marked to allow of its being transferred from some original building, and of being set up again in the same order. The wall on which this inscription was found forms the arc of a circle 8.70 met. in length.

The second discovery of Dr. Halbherr was that this circular building had, at a later date, been turned from its original purpose and reconstructed to be used as a theatre. On running his exploring trench from the outer wall across the hemicycle, at 2.60 met. distance from the inscribed wall-face, he came upon a great square brick pier, rising 3.20 met. above the level of the ancient pavement. This pier is slightly convex toward the outer wall, and slightly concave toward the interior of the circle, and is enriched with an ornamental string-course, above which is a cornice composed of three series of bricks, one over the other so as to form a kind of capital. From this cornice sprang two lateral arches, of which remains can still be seen. On widening the trench on either side, were found two other piers, each a met. from the first, so that it became evident that a row of brick piers all round the semicircular outer wall supported a heavy vault of dressed stone-work, which itself upheld a series of concentric tiers of seat-rows, forming the *cavea* of a small theatre. Of these, two tiers of stone seats and a short pavement-step are all that remain, but about one-third of the *cavea* has been unearthed. It must have been divided into three *cunei* by two radial stairs, two other means of approach being very probably afforded by a flight of steps at each end. In the one radial stair brought to light the arrangement is as in other ancient theatres, two steps corresponding to each single tier of stone seats. The pavement of the orchestra is completely covered with large rectangular slabs of white and of variegated marble, and is $3\frac{1}{2}$ met. below the level of the ground. The construction of the great vault is like that of a Roman vault at Nîmes described by Durm. A wall $1\frac{1}{2}$ met. thick runs across the opening of the hemicycle, making the enclosed building in shape like a horseshoe. This transforma-

tion of the original circular building into a theatre is evidently the work of Imperial times.

This theatre is different from either of the others known to have existed at Gortyna. The larger of these two rested on the south flank of the akropolis, and is still distinctly recognizable; the site of the smaller one is no longer known, though the plan of it has been preserved. The third theatre now revealed by Dr. Halbherr on the opposite bank of the river, immediately in front of the still-existing ancient theatre, is of a quite different plan.

It is evident that this locality, close to the akropolis and to the riverside, must have belonged to one of the principal and central quarters. All doubt has been removed by the recent discovery of a stone set upside down in the north wall of the circular building, on which mention is made of the *market-place bridge*, showing that the agora was near the river; while two stones, used as old material in the buildings on the riverside, have been found, the one whole, the other broken, bearing two dedications of *agoranomoi*. One of these two stones was found in the interior wall of the *hypostenion*, the other in a wall built with large stones forty paces southeast of the same building. The agora therefore seems, in Dr. Halbherr's opinion, to have extended from the mill close to the circular building to beyond the ancient ruined church of St. Titus, along the left bank of the Lethaios. The whole of this zone, now arable land, not only preserves the foundation-walls of many large buildings, but has proved itself to be an exceedingly rich quarry of colossal statues of the Macedonian and Roman epochs. Five of these were discovered, one after another, in a haphazard excavation made on the spot by the two brothers who owned the mill, in their search after building-material; at the same time were discovered two busts of Roman emperors and four marble heads; while, later on, other statues were found on the same site, which now, together with the former ones, are safely lodged in the museum of the Greek Syllogos at Candia. In Byzantine times, when in consequence of the ruin of so many ancient monuments the level of the soil was considerably raised, the whole of this zone, or at least that part of it nearest the newly discovered theatre, became a burial-place. To this period Drs. Halbherr and Fabricius refer the tombs that have been discovered a little to the south of the circular building, some being on the river-bank. The polychrome archaic Hermes found lying on the pavement of this building, near the door on the east side, of which it formed one of the jambs, surmounted by a capital, and attributed by Milani to the end of the fifth century B. C., is figured in the recently issued *Museo Italiano di Antichità Classica* of Firenze.—*Athenæum*, March 24.

PHAISTOS.—Beside the objects already enumerated, there were found a great number of small terracotta vases and several lance-heads. The ground

all about was found to be full of human bones, amongst which are some well-preserved skulls. All these, together with the other objects found, have been consigned to the Museum of the Greek Syllogos at Candia.—*Athenæum*, March 24.

ITALY.

PREHISTORIC AND CLASSICAL ANTIQUITIES.

ALLUMIERE.—*Necropolis.*—On the *Casalone* estate, a late Etruscan necropolis was found where the bodies were placed in oblong tombs built of rough blocks of local stone, each containing a small rude vase, local imitations of Greek forms—*kantharoi* and *oinochoai*.—*Not. d. Scavi*, 1887, p. 442.

AREZZO.—*New discoveries.*—A part of the old city-wall to the south has been discovered. The excavations in the *Piazza grande*, under the stairway of the Palazzo di Fraternità, has had important results. A number of broken-up Etruscan tombs have been found which are a continuation of those lately discovered under the r. wall of the neighboring cathedral. They all date from the third century B. C., and contain similar objects of Etrusco-Campanian ware with the palmette. They mark an ancient road that led up to the city-gate. These tombs were evidently disturbed by the Romans, for above them was erected a building of the Augustan age. Near the public baths another group of tombs came to light; also part of a long Etruscan wall.—*Not. d. Scavi*, 1887, p. 437.

CASTELFORTE (South Italy).—*Roman baths.*—In the commune of Castelforte, some works undertaken for the erection of a mineral-bathing establishment led to the discovery of numerous remains of ancient constructions covering a length of 57 met. and a width of 40. The building on the left of the road is a thermo-mineral station formed of two rows of chambers placed back to back. An entrance with two brick columns leads down to a tetrastyle with a pavement of black and white mosaic, and in the middle the impluvium: from it rises a marble column on an octagonal base. The walls are mixed of *opus reticulatum*, *incertum* and *lateritium*. There are several niches for statues, faced with marble. From this lead several other rooms, the last being of large proportions, next to which is the *calidarium*, which opens into the *tepidarium*. On the right of the road are two buildings, in front of which is a row of columns, evidently a *hospitium* or *valetudinarium*. Remnants of a number of statues and several coins were found. The period seems to be the first century of the Empire.—*Not. d. Scavi*, 1887, p. 406.

CHIUSI.—*Roman and Lombard antiquities.*—Near the Ch. of S. Apollinare, there came to light a necropolis of the Lombard period, consisting of five tombs containing only skeletons. Under them were three late-Roman tombs containing some finely worked jewelry: at a still lower level was found a circular mosaic pavement, 8 met. in diameter, of good

style, by which were lying a travertine column, fragments of antefixæ, coins of Drusus and Nero, *etc.*, indicating the site of a Roman temple.—*Not. d. Scavi*, 1887, p. 399.

LUCIGNANO (Val di Chiana).—*Etruscan necropolis*.—In the centre of a valley between the three towns of Toiano, Asinalunga and Lucignano, there appears to exist a large Etruscan necropolis which joins on to that of *Casalta*, well known for the discoveries made in it. The proprietor, Sig. Bernardini, has opened two chamber-tombs and found the paths leading to seven others. Of the two tombs opened, the first consisted of two chambers, the first, square with a niche on the r., completely despoiled, the second containing many vases, piled up, of archaic black *bucchero* ware. With the exception of a bombylios on which are three animals in black, only one vase had ornamental decoration. These two figured objects place the tomb in the VII century B. C. The second tomb consisted of a square cell containing four cinerary urns of calcareous stone: a black-figured *tazza* dates this tomb from the VI cent.—*Not. d. Scavi*, 1887, p. 441.

NEGRAR DI VALPOLICELLA (prov. of Venezia).—*Mosaic pavement*.—On the private property of Sig. Caprini has been found a large mosaic pavement of which only about 4 met. have been uncovered. On the N. W. side the mosaic is best preserved: an outer band has a decoration of red cubes on a white ground, while in the two succeeding ones the decorative pattern is in black on white or dark red on white: at the only corner uncovered is a scene about one metre square, representing a chariot with two horses racing, the reins being held by a naked boy: the delicate gradation of the flesh tints is remarkable: a great variety of colors are used—yellows, malachite green on the chariot, dark red in the wheels, light bay and grey in the horses.—*Not. d. Scavi*, 1887, p. 431.

PALERMO.—*Discoveries in the Carthaginian Necropolis*.—The existence of a large Palermitan necropolis, belonging to the Carthaginian period, extending from the *Via de' Porrazzi* to the neighborhood of the *Educatario di Sales* and the *Albergo dei Poveri* was already known. Outside Porta Nuova, a small sepulchral chamber, cut in the tufa, has been found, containing a rude sarcophagus also of tufa: within it and near it a number of vases were picked up. The interest centres in one vase which is the first painted vase known to come from Palermitan soil (owned by the museum). It is a large and deep archaic *tazza*, restored in ancient times: on the two sides of an upper band are painted two perfectly similar scenes in black figures, at the ends of which are two sphinxes. This vase was preserved from an earlier tomb.—*Not. d. Scavi*, 1887, p. 428.

PERUGIA.—*Discovery of Etruscan Tombs in the Cemetery*.—The work on the new wall of the public cemetery in July led to the finding of three covers of Etruscan urns, and, consequently, the municipality began exca-

vations on this site which led to interesting discoveries. The first family sepulchral chamber found was untouched and contained thirty travertine urns, nearly all having inscriptions and reliefs: above, on the right, were a number of terracotta vases of various sizes, also inscribed in Etruscan and Latin. All the inscriptions refer to the *Rafia* or *Rufia* family, to whom the tomb belonged. Of the mirrors found two are Etruscan, and two Roman. Some of the inscriptions on the urns are simply painted, some are inscribed and also painted.—*Not. d. Scavi*, 1887, p. 391.

Curious are sixteen *tesse* of white bone, all inscribed with name and number, and with these were found 33 flat stones, irregularly elliptical—all for use in some game.

PESCHIERA and BREONIO.—*Palethnological investigations.*—During the autumn, Prof. Castelfranco and De Stefani went on an archæological excursion to the Veronese commune of Breonio, which contains the famous palethnological stations. Preliminary diggings at Peschiera resulted favorably, in the finding of a number of objects of *selce piromaca*, of bronze and of pottery belonging to the bronze age or first iron age: they have been added to the Museum of Verona (*cf.* vol. III, p. 460).

POMPEII.—*Late discoveries.*—All the discoveries noticed on p. 473 of vol. III of the JOURNAL are fully described in the *Notizie degli Scavi* (1887, pp. 415–20). The silver referred to forms a service for four persons: four cups and four saucers; four *tazze* with horizontal handles; four smaller *tazze*; four egg-cups; a filter and an *ampulla*. All the pieces (except one cup) are in perfect preservation. Copies are given of the tablets, from which the wax soon became detached. In all three appear the names of Dicidia Margaris and Poppea *liberta* of Priscus. Two belong to the year 61 A. D.

Mosaic fountain.—In a house which is at present being excavated has been discovered the finest fountain-mosaic ever found. The fountain is in the form of a niche, on the ceiling of which Venus is represented issuing forth from the sea-shell, holding by the hand the little Cupid who is also rising from the water. Beneath this group are a number of Nereids and boys with dolphins. On the shore of the sea are two draped females, one standing, the other seated, making gestures of amazement. Opposite them is another female figure, and, between them, a fourth turns her back to the spectator. The ground of the whole is blue, with a border of shells.—*Builder*, December 17.

Street of Tombs.—The discovery of a Street of Tombs has already been announced in the JOURNAL, vol. II, p. 484 and vol. III, p. 183. These tombs have finally been entirely uncovered and are carefully described by Prof. Sogliano in the *Notizie degli Scavi* for November. They are placed on either side of the road that led to *Nuceria* (Nocera). There are six. The two (Nos. 1 and 2) placed on the right of the road were previously

described. Of those on the left the first (tomb 3) rises on a lava basement with tufa mouldings, almost entirely hidden by the earth embankment on which it rises: it is square and is preserved up to a maximum height of 3.40 met. It is built in *opus incertum* reinforced at the corners by brick pilasters, and includes a space 1.67 by 2.20 met. to which one descends by a small staircase adjoined to the north and east sides. Under the monument is a small cell with cylindrical vault, 1.75 met. square and 2.65 met. high, which appears to have been reached from the rear. The whole structure is covered with white stucco cut up into squares, except at the back, where it is left plain: the pilasters at the angles are also smooth. On the front are three arched niches also revetted with stucco and resting on the basement; each one contained a herm-cippus of lava. In front of each of the two side *cippi* was a hole which led down into the vault of a small square niche, in which was placed, directly under the hole, a terracotta urn with burnt bones. It is not known what was the shape of the upper part of the tomb, as it has fallen. Tomb 4 has at each corner of the front a cannellated brick $\frac{1}{2}$ column with a debased Korinthian capital of tufa which supports the architrave, while at the back there are similar half-columns. The finest is tomb 6, raised on a fine travertine basement: it is also of stuccoed lava with cannellated brick columns and a fine doorway of travertine. Ten statues have been found, four male and six female, which are, with two exceptions, not well preserved. Four are of travertine, and the others of tufa, covered with stucco with traces of colors. All are slightly over life-size. The two best preserved are of travertine, one male and one female. All are draped, and the male statues have the costume of the so-called municipal statues, with the ample toga, the ring and the cista. The arrangement of the hair in the female statues is like that found in portraits of the first half of the first century. Lately, ten Romano-Korinthian capitals have been found, of stuccoed tufa. The uniformity in style of the tombs indicate that they were all built at about the same time, and this is confirmed by the inscriptions and coins. This is interesting as an indication of when a Roman suburb was added to this part of Pompeii. The gladiatorial inscription on No. 2 gives the *terminus ad quem* of the erection of this tomb, which cannot be posterior to Tiberius. The mention of an *L.[Vol]usius Saturninus* on No. 3 may refer to the consul of the year 3 A. D., and the rest of the inscriptions point to the same period. Only coins of Augustus and Tiberius have been found besides a Republican *As*.—*Not. d. Scavi*, 1887, pp. 452–58.

PORRETTA (near).—*Discovery of two prehistoric terramare*.—At *Poggio della Gaggiola*, two miles from Porretta, on a summit about 80 met. long by 50 wide, there have been found, in the usual stratum of black earth, many remnants of a *terramara* station. The fragments of pottery found

are of the usual kind. Of especial interest is a bronze fibula belonging to one of the most ancient types, like that of Peschiera. Its importance is great, in consequence of the uncertainty as to the existence of the fibula in the *terramare*. Above this prehistoric stratum is one of the Certosa-Etruscan period. At *Santa Maria Villiana*, on the highest crest of this mountain, a thing of almost unique occurrence, was a prehistoric station, a *terramara* of considerable extent, interesting both from its elevated position and its distance (56 kilom.) from Bologna.—*Not. d. Scavi*, 1887, p. 387.

ROMA.—*New Review*.—The first numbers have appeared of the *Archivio Storico dell' Arte*, a review of art and archæology published at Roma, and destined to appear monthly under the editorship of Count D. Gnoli. Among the contributors are Signor A. Venturi, M. Eugène Müntz, Mr. R. C. Fisher, M. H. v. Tschudi, etc. It will be seen that the review is intended to have an international character.

Archæological promenade.—The details are being settled for transforming the Roman Forum, the Palatine, and the Baths of Caracalla into a grand archæological promenade planted with groves of trees. The Bill authorizing the scheme was passed last summer.—*Athenæum*, Feb. 11.

Villa Casali.—"The Villa Casali has been lately excavated from end to end at an average depth of thirty feet, to make room for the new military hospital. A few only among the shapeless ruins have been identified as private houses and palaces belonging to the aristocracy; such as the *Domus Anniorum*. We have been able to identify two other groups of ruins: one as the residence of a Stertinius Xenophon, a personage otherwise unknown; the second as the residence of Diadumenus, the celebrated freedman of Domitian. His house on the Cælian must have contained quite a collection of works of art, because, in spite of former spoliations, we have been able to gather among its ruins the following fragments of sculpture in Greek or Carrara marble: the head of a faun; a bust of Jupiter Sarapis; a crouching lion; a statue, five feet high, of a youth with the Phrygian cap, described as Paris by Visconti, as Ganymedes by others; a head of Pan (perfectly beautiful); a female bust, bearing a strong likeness to Plautilla; and another resembling, both in the features and in the arrangement of the hair, Marciana or Matidia."—LANCIANI, in *Athenæum*, Feb. 4.

Porta Capena.—The municipality has lately purchased the hypogeum of the Scipios, and the columbaria of Pomponius Hylas, near the Porta Latina. The intention of the city authorities is to demolish the farmhouse, built by the Sassi family some two centuries ago, right above the hypogeum; to demolish the buttresses and substructures which spoil and disfigure the look of the famous crypts; and to reopen the old entrance to them from the *diverticulum* or cross-lane which joined the Appia and the Latina, the pavement of which has already been discovered at both ends.

The Government at the same time has reclaimed and recovered possession of the columbaria found by Campana in the adjoining Vigna Codini.—LANCIANI in *Athenæum*, Jan. 7.

Porta Salara.—Under the Porta Salara have been found during the recent explorations both inscriptions and tombs. One of these inscriptions is of great value, as it is a fragment of the Roman calendar, giving the feasts from the 14th to the 21st of August.—*Athenæum*, March 10.

Porta Trigemina.—During the demolitions now in course of progress at the foot of the Aventine, near S. Maria in Cosmedin, a large arch has been discovered built of massive blocks of tufa, and three and a half metres wide. Under this arch passed a Roman road, of which the pavement has been found. Hard by have been discovered very ancient constructions built upon the rock, which are thought to be remains of the wall of Servius Tullius. The arch is supposed to be the ancient Porta Trigemina, and the road in that case would be the Clivus Publicius.—*Athenæum*, March 10.

ARCHITECTURE.—*Portico of Octavia*.—In carrying out the work of the *piano regolatore* in the Ghetto, the southern façade of the portico of Octavia is being uncovered, as well as the western side. The inscription on the epistyle is now entirely visible.—*Not. d. Scavi*, 1887, p. 448.

On the northwest side two marble columns have been discovered, erect on their bases, belonging to the line of columns which formed the left wing of the portico.—*Athenæum*, Jan. 14.

Aqueduct of the "Aqua Julia".—The aqueduct of the Aqua Julia, one of the many hydraulic undertakings accomplished by Agrippa in the year 721 of Rome, was fed by the springs now called *Degli Squarciarelli*, one mile above the monastery of Grottaferrata. From these springs down to the seventh milestone of the Via Latina, where the channel makes its first appearance above ground, nothing was known of its course. Of the many terminal stones which must have marked this course, at intervals of 240 feet from each other, not one had been discovered up to the present time, in spite of careful investigations made by Fabretti, Revillas, Canina, Parker, and myself. But not fewer than nine inscribed *cippi* have come to light within the last few months, one near the springs at Grottaferrata, the others near the racecourse of *Le Capannelle*, on the farm of Cavaliere Bertone. The legend engraved on these stones is everywhere the same: "[Aqua] Julia: [cippus set up by] the Emperor Augustus in accordance with a decree of the Senate." Then follow two numbers; one is the progressive number of the stone, the computation being made against stream, from the "terminus" or reservoir in Rome to the springs; the second number (which never varies) marks the interval of 240 feet from stone to stone: *e.g.*, IVL|IMP CAESAR|DIVI F AVGVSTVS|EX S·C|CLVI|P·CCXL. The advantages of this simple system of double numeration are evident:

there was no need of measuring the ground from the nearest landmark, or to examine the official maps, whenever the *aquarii* had to report to their officers the exact spot at which a leak had sprung or wilful damage had been done to their aqueduct. They would simply multiply the constant by the progressive number. Thus we know that the *cippus* lately discovered at Grottaferrata was 302×240 feet distant from the central reservoir at Rome, that is to say, 72,480 ft. = 21,391 metres. The total length of the aqueduct, according to Frontinus, amounted to 22,815 metres, hence there must have been altogether 322 *cippi*, ours being the twentieth from the springs. Intersecting at this point the Julian aqueduct was the Claudian, *ductus Anionis Novi et Claudiae*: a portion of its double canal was found, between *cippus* CLIII and CLIV of the Julian.—LANCIANI in *Athenæum*, Jan. 7; *Not. d. Scavi*, 1887, p. 558.

Aqueduct of the "Aqua Virgo."—Between the Arch of Claudius, still in existence at the Via del Nazzareno, and the magnificent nymphæum destroyed by Cardinal Ludovisi in 1636 when laying the foundations of the church of S. Ignazio, the course was unknown of this aqueduct, built by Agrippa in 735 u. c. It has been discovered lately in three different places: first, in the garden, formerly Del Bufalo, now belonging to the heirs of the late Alessandro Castellani; secondly, at the corner of the Via delle Muratte and the Via della Vergine; lastly, in the court of the Palazzo Sciarra. This last piece was in a state of perfect preservation and very beautiful: it consisted of four arches and five piers, built of brown volcanic stone, with moulding and keys of white travertine; the channel running on the top of the arches was built of bricks, and coated inside with cement as hard as iron. These are the only known remains of the arched constructions of Agrippa, the arches visible in the Via del Nazzareno belonging to that portion of the aqueduct that was rebuilt by Claudius after its destruction by Caligula.—*Bull. d. Comm. arch.*, Feb., 1888; LANCIANI in *Athenæum*, Jan. 7.

SCULPTURE.—*Ex-votos of the Temple of Minerva Medica.*—On the same site where a similar discovery took place last May in connection with some ruins that probably belonged to the temple of Minerva Medica (see *JOURNAL*, III, p. 474), another mass of ex-votos has come to light, including statuettes, male and female, of varied character, heads in front and profile, hands, feet and other members, fragments of nearly life-size statues, figures of animals (oxen, calves, doves), minute lamps, vases and paterae. There are several instances of the group representing the three Eleusinian divinities, Demeter, Persephone, and Iakchos. Especially interesting is a statuette of Minerva, her left arm resting on a large shield placed on a *cippus*.

The Rape of Helen.—On Via Cavour was found a beautiful basrelief in terracotta used as the cover of an old drain. It had formed part of a frieze

40 cent. high, and is 46 cent. long. Its artistic workmanship and the beauty of its design place it in the best period. It appears to represent the Rape of Helen. Paris stands on the right of a quadriga, drawn by four fiery steeds, in which Helen stands in a quiet attitude, while Paris seems full of haste: he wears the Phrygian cap, the short chiton with long sleeves, and trousers. This interpretation of the scene is unique: Helen is represented either as carried off rather by force or as on a vessel.

INSCRIPTIONS.—MAG. HE. .SVFFRAGIO. PAG. PRIM. .ILVDOS. FECER. . . . The words *suffragio pag(anorum)* show this fragment to belong to an inscription of an historical character set up by the magistrates of a *pagus* first elected to this office, who gave games, etc. The term *pagani* was applied to those inhabitants who lived next to the *montes*, not as a political or administrative but as a religious and festive distinction. The inscription may refer to the restoration in 690 u.c. of many of the Urban colleges.—*Not. d. Scavi*, 1887, pp. 446, 553.

Honorary inscription to L. Julius Julianus.—A very important inscription on a cippus has been recovered from the Tiber, near the Marmorata. It is an honorary epigraph to L. Julius Julianus, prefect of the prætorium and *præfectus annonæ*, and reads as follows, with some restorations by Professor Barnabei: *L. Julio Ve[hi]lio G[rato] | Juliano pr[æf(ecto) p]r[æ]torio, pr[æ]f[ect]o | ann(onæ), a ration(ibus), pr[æ]f(ecto) c[lassis] p[raet]oriar[um] misenat(is), pr[æ]f[ect]o | classis pr[æ]t(oriar[um]) raven[nat(is), pro]c(uratori) Aug(usti) et pr[æ]p(osito) vexill[ar]tion(ibus) tempore bell[i] Britannici pr[oc]uratori Aug(usti) provinc[ia]e | Lusit[ania]e et Vett[onia]e, pro]c(uratori) Aug(usti) et pr[æ]posit(o) vexillationis per, pro]c(uratori) Aug(usti) et pr[æ]f(ecto) classis po[n]tic[æ] | pr[oc]uratori Aug(us-torum) [et] pr[æ]p(osito) vexillationis per Achaïam et Macedoniam | et in Hispanias, adversus Castabocas et | Mauros rebelles, pr[æ]posito vexillatio[n]ibus tempore belli Germanici et Sarmatic(i) pr[æ]f(ecto) alae Tampianae, pr[æ]f(ecto) alae Herculanæ, trib(un)o cohort(is) primæ Ulpiae Pan[noniorum], pr[æ]f(ecto) cohort(is) tertiæ August(a)e | Thracum, donis militariibus donato ab impe[r]atoribus Antonino et Vero ob victoriam | [belli] Parthi, item ab Antonino et | [Commodo] ob vic[tor]iam belli Germ[anic]i | [et] Sarmatici*

Julius Julianus received military gifts for services in two wars, which are evidently the great Parthian war of 161 to 166, fought at the beginning of the reigns of Marcus Aurelius and Lucius Verus, and the German war which happened between 170 and 175, after the death of Verus. Apparently this personage is the same as the Julianus, prætorian prefect, who was killed and his body thrown into a *piscina* by Commodus (LAMPRIID., *Commod.*, c. 11). This inscription cannot be earlier than 189, the date, apparently, of his appointment as prætorian prefect, or later than 192, the date of the death of Commodus. The long and glorious career, whose stages

and honors are enumerated in this inscription, lasted for nearly thirty years, during a period of great peril for the empire. Barnabei sums up as follows: *Sappiamo per conseguenza, non solo che L. Julio Juliano aveva incominciata la sua carriera al tempo della guerra partica (161-166); che aveva ottenuto il comando delle vessillazioni al tempo della guerra germanica (167-175), che ebbe la procura imperiale ed il comando delle vessillazioni al tempo della guerra britannica sotto il regno di Commodus (183-184), cinque anni prima di giungere alla prefettura del pretorio, con cui ebbe termine la sua carriera nell' anno 189; ma sappiamo anche di più; perocchè con questo dato cronologico della guerra britannica, veniamo a conoscere in quali anni le cariche avute fra l'anno 184 ed il 189 si devono ascrivere. Abbiamo in fatti, dopo la guerra britannica terminata il 184, il comando della flotta pretoria ravennate nel 185; il comando della flotta pretoria misenate nel 186; l'amministrazione della cassa centrale nel 187; la cura dell' annona nel 188; finalmente la prefettura del pretorio nel 189.* This gives the charges occupied by Julius Julianus after 183: but further it is to be noted, that he occupied various grades in the auxiliary forces from about 160 onward; that he had a cavalry command during the German war (170-175), and in Spain in 176-177 for the repression of the Moors; was in the same position in 178-179 in Achaia and Macedonia against the Castaboci (the Κοστοβῶκοι of Pausanias XLIV. 5); commanded the fleet of Pontus in 180; had the cavalry command in an unknown province in 181; was imperial procurator of Lusitania and Vettonia in 182. The inscription was erected in the *statio annonae* itself, after his promotion to the prætorship, and, as he was nearly at once murdered by Commodus, was probably then cast into the Tiber.—*Not. d. Scavi*, 1887, pp. 536-53.

Ruvo (Puglia).—A Greek tomb.—At a slight distance from the city a Greek tomb was found, intact but ruined. The falling in of the roofing had crushed the greater part of the vases. The drawing of all the vases is free, though sometimes careless: the workmanship seems local and to be of the best period of Apulian art, not posterior to the third century B. C. An *amphora* has arabesques on the handles with swan-heads and gorgons. On one side is a *heroön* in which is seated a youth (poet) to whom a woman and a youth bear funeral offerings. On the opposite side is another group bearing offerings. A *kalpis* also has in the centre a sepulchral monument (cippus) on which stands a basin, and, below, a *kantharos* and a *patera*: on one side is a nude warrior, on the other a youth and a woman (meeting of Orestes and Pilades with Elektra at the tomb of Agamemnon?). A large pail-like vase has on one side an erotic scene in an arbor, on the other, Dionysos crowned by a Mænad and accompanied by a Satyr. Other scenes are painted on a *pelike* and a *holmos*, not to mention a number of other vases of minor importance.—*Not. d. Scavi*, 1887, p. 422.

Suessula (Campania).—*Pre-Roman Necropolis*.—In the last issue for 1887 (No. 4, pp. 235-75) of the *Bull. d. imp. Istituto arch. germ.*, Prof. F. von Duhn published an interesting report on the excavations carried on, in the necropolis of Suessula, between 1879 and 1886, by D. Marcello Spinelli. Even now, a large portion of the necropolis and the entire site of the ancient city are quite unexplored. The most important result of the last excavations has been the discovery of tombs cut out of a cube of tufa, proof of the use at Suessula of the Greek rite of cremation at a time which may be defined as the first half of the fifth century. The lower block is hollowed out in rectangular shape to receive five vases, for which small cuts are made in the bottom: the centre was occupied by a bronze urn containing the ashes, the cover of which was decorated with an adorant and two horses. The four smaller vases are in terracotta: an Attic amphora, in the severe red style; a double-headed rhyton, etc. The second cube, which serves as cover, is also hollowed out, like the lower one. In the second of the tufa tombs there was a simpler bronze urn, a beautiful Attic amphora, with Thetis, and Hephaistos polishing the shield of Achilles. Fragments of another vase of this period had attached to its neck four bronze figures of Amazons on horseback. The new period in the history of Suessula, thus disclosed, is evidently one in which the Hellenism of Kume was victorious all along the line, introducing even the Ionic rite of cremation with all its details. It is interesting to distinguish the three periods found at Suessula. I. *Stone tombs (tombe a pietra)* or the native system of burying the dead, either in the bare earth or in wooden boxes, surrounded by a rich display of bronzes and of earthen vases in *graffito*, in ornamental relief, geometric, proto-Korinthian, "Korinthian," both imported by way of Kume or imitated; none, however, of the usual black-figured or of the Mykenain ware. The tomb is marked by a pile of white calcareous stones, above and under which are often found objects corresponding to the mortuary offerings. This period includes two centuries, from about 720 to 520. II. *Tombs of tufa cubes*: Græco-Ionic system, described above; lasted during fifth century. III. *Tufa or brick tombs*: the native system of inhumation, evidently in more or less continuation of system I. In these tombs it was the custom to place eatables by the side of the body. The period between 400 and 250 B. C. is rather a limited one for this style.

SYBARIS.—*Hypogeum and Tombs*.—Near the tower Mordello, they have discovered a *hypogeum*, where have been found, up to the present (March 28), about 30 tombs, containing a great number of objects of bronze, arms, ornaments, a bronze vase, many terracotta vases, a necklace of glass, a cuirass, and a large number of objects in iron, amber, and ivory.—*Cour. de l'Art*, April 6.

TERNI=INTERAMNA.—*Its Sabine foundation*.—The discovery of part of the

primitive walls of *Interamna* (mod. Terni) leads Comm. Gamurrini to express his opinion regarding this city and the neighboring Umbrian necropolis. The city was evidently square in form and situated *inter amnes*: it belonged to a conquering people who defended their supremacy by founding a city in the plain against the conquered people whose settlements already occupied the surrounding heights. This conquered people were the Umbri, whose large and strong city, now called Cesi, was situated ten kilom. from *Interamna*. The local tradition perpetuated in an inscription of 32 A. D. is, that *Interamna* was founded 704 years before that date, i. e., 81 years after Rome. At this time the power of the Sabines was growing, as is shown also by the founding of *Falerii*; and it is highly probably that they were the builders of *Interamna*, and put an end to the neighboring Umbrian settlement whose necropolis, still to be completely explored, would therefore belong to a period anterior to the seventh century B. C.—*Not. d. Scavi*, 1887, p. 442.

TIVOLI.—*Statue of Bacchus.*—Near the bridge have been found the fragments of a life-size statue of white marble representing the youthful Bacchus with the lion-skin placed on his head and hanging over his shoulders.—*Not. d. Scavi*, 1887, p. 450.

VETULONIA.—*Review of the discoveries.*—The discoveries made in the vast and important early-Etruscan necropolis of Vetulonia during 1885 were described in this Journal, vol. I, p. 447, and vol. II, p. 92; those of even greater importance made during 1886 were also mentioned on pp. 492–94 of vol. II. The latter were not then finished nor were the objects classified. Now, a long monograph on the subject, accompanied by plates, has been published by the excavator, Cav. Falchi, in the *Notizie degli Scavi* (Dec., 1887), to which especial attention should be given.

VILLANOVA (near Forli).—*Roman Tombs.*—In continuing excavations at this prehistoric station, three Roman tombs were unearthed, at the depth of one metre: one was for *incineration*, two for *inhumation*. The objects found were not important, as the tombs had been rifled in early times.—*Not. d. Scavi*, 1887, p. 436.

CHRISTIAN ANTIQUITIES OF ITALY.

MODENA.—*A collection of engraved wood-blocks.*—In the *Athenæum* of November 19th, 1887, appeared a short notice stating that a large collection of engraved wood-blocks, formerly belonging to the printing establishment of the Modenese family Soliani, had been recently purchased by the Minister of Public Instruction in Italy for the R. Galleria Estense at Modena. The collection consists of 3,611 blocks, most of them having formed part of the stock in trade of the Soliani family. This printing establishment, however, at the time of its foundation evidently became possessed

of many wood-blocks belonging to preceding printers, as some blocks are marked, for instance, with the name of Gadaldino, a Modenese printer of the sixteenth century. Representations of the Madonna and of saints are of frequent occurrence, evidently published for sale in the *piazze* on market-days and at fairs, many of them being reproductions of early paintings existing in the Modenese churches; for example, the *Madonna dei Capuccini di Modena*, which is no other than the *Madonna del Roseto*, a picture by Francia now in the gallery at Munich. Besides these subjects there are blocks with designs for embroidery, ornaments of book covers, initial letters, friezes, illustrations for *incunabula* and other printed books. Examples are amongst them dated as early as the fifteenth century; from one of them, undoubtedly of that early period, was printed the fragmentary impression published by Dr. Lippmann in the *Jahrbuch d. k. Preuss. Kunstsammlungen* (vol. v, p. 318), representing a Madonna with the Infant Saviour. The block shows the part missing in Dr. Lippmann's impression, *i. e.*, four saints, two being on each side of the Madonna, and the Annunciation in the spandrels of the arch under which the Madonna is seated. There is also the block for Christ bearing His cross, and the *Ecce Homo*, reproduced by Dr. Lippmann in the same work (vol. v, pp. 322-3). It is evident that the impression of the *Ecce Homo* belonging to the Department of Prints at Berlin is a modern one, taken from the above block. There can be no doubt that these blocks, now the property of the R. Galleria Estense, have been used in recent times by speculators for the purpose of taking impressions on old paper colored with an infusion of coffee. Monograms and dates also were frequently added to the blocks, as an instance of which may be mentioned an *Ecce Homo*, an early woodcut of the fifteenth century, which has the monogram of Ludwig Krug; also that of a Madonna enthroned, surrounded by saints, of the fifteenth century, upon which has been cut the monogram of Marc Antonio. An additional proof that the woodcut of the *Ecce Homo* reproduced by Dr. Lippmann is a modern impression is to be found in the fact that the parts in shadow show the marks of worm-holes.

Among the blocks of the sixteenth century are a series representing the life of Christ, engraved by Francesco di Nanto di Savoia from the designs of Girolamo da Treviso; *L'Accademia delle Scienze*, the subject being taken from a design by Giuseppe Porta, called *Il Salviati*; wild horses by Baldung Grün; two representations of the labors of Hercules; a series of heroes on horseback from romances of chivalry, as, for example, the *Paladino Astolfo Rinaldo of Monte Albano, etc.*, in Spanish costumes. The largest block in the collection, engraved in two pieces each of which measures 80 cc. in height by 52 cc. in breadth, is interesting. The subject is entitled *L'Albero di Frutti della Fortuna*. On the shore of the sea rises the tree of Fortune,

on the top of which, upon a globe, is seated the goddess with bandaged eyes, her hair fluttering in the wind. From the thick foliage of the tree are suspended crowns of popes, emperors, and princes, books, instruments of music, agricultural implements, satchels, weapons of warfare, domestic utensils, and other things. A man is seen clasping the trunk of the tree, and others of different ages stand around in various attitudes.

Besides the blocks of the fifteenth and sixteenth centuries we find a large number of later date, which are of considerable importance in the history of wood-cutting, from the fact that many amongst them were engraved for sale to the people at markets and fairs, few impressions of which have been preserved to our day. One interesting specimen of the fifteenth century shows the church of S. Ciriaco of Ancona and of Recanati. This collection of blocks illustrates the customs, games, masks, and diversions of the people. The acquisition of them by a public museum is a fortunate circumstance, and when the whole series has been classified and arranged it will afford valuable aid to the study of the history of wood-cutting.—A. VENTURI, in *Athenæum*, Jan. 21.

RAVENNA.—*The mosaic of San Giovanni in Fonte.*—At a recent meeting of the German Institute in Rome (Dec. 23), Herr Ficker disclosed an important fact regarding the mosaic in the centre of the dome representing the baptism of Christ, which is the earliest known monumental representation of this subject. It has always been thought singular that the rite of baptism by affusion (John the Baptist is pouring water on the head of Christ), which did not become common until late in the Middle Ages, should be here represented, and that John the Baptist should have beard and nimbus. A close examination, on the occasion of late restorations, has shown Herr Ficker that the dove, the nimbus, head, chest, and right arm of John the Baptist together with the vase, the upper part of the cross, the nimbus, head, neck, left shoulder, and right arm of Christ, are all restorations in the style of the XVII century, anterior to the publication of Ciampini's work (1690). Restorations of less moment were made in the lower part of the composition. From the analogy of other monuments, the type of Christ should be youthful and beardless, and John should be laying his right hand on the Saviour's head.—*Bull. d. Istituto arch. germ.*, 1887, 4, p. 296.

ROMA.—*Christian sarcophagi.*—On the occasion of the Pope's Jubilee, Prince Piombino offered His Holiness two marble sarcophagi. The first is sculptured on the front with the figures of the twelve Apostles and the cross surmounted by the monogram in a radiating nimbus. The second, also carved only on the front, is twice as high, and has in the centre the full-length figures of the man and his wife who were buried in the sarcophagus: between them is the figure of Juno Lucina, while at their feet are Psyche with butterfly wings, and Cupid (destroyed). On the left, in

two rows of reliefs, are represented the creation of man and woman by the Trinity; the cure of the man born blind: on the right are, the resurrection of Lazarus, and Moses striking the rock. This magnificent work belongs to the fourth century, while the former sarcophagus is probably one or two centuries later. Both are to be placed in the Museum of the Lateran.—*Gazette Arch.*, 1888, Nos. 1-2.

Catacombs of Santa Priscilla and St. Callixtus.—Recent excavations in S. Priscilla have led to the discovery of two paintings. One represents Christ between SS. Peter and Paul, giving to the former (?) the book with the inscription, CHRISTUS LEGEM DAT. In the other are represented Adam and Eve, between whom is Jonah under the gourd.—In demolishing a house, near S. Pietro in Vincoli, was found part of an early Christian inscription of the Catacombs of Callixtus, which had previously been known only by a copy.—*Revue Critique*, 1888, No. 4.

Early Christian frescos.—In vol III, pp. 481-82, a notice was given of some frescos, partly Christian in character, recently discovered in a Roman house of the fourth century, under the church of SS. Giovanni e Paolo. Besides the subject of Moses removing his sandals, there is Moses striking the rock—in the tablinum. On a wall of later date, which interrupts the ambulatory, are historical scenes, probably illustrating the acts and sufferings of Christian martyrs—perhaps of SS. Giovanni and Paolo themselves. By the side of the *fenestrella confessionis* in this wall are figures of SS. Peter and Paul, and, below, an *orante* figure at whose feet are prostrated a man and woman. Comm. De Rossi believes this to represent one of the two martyrs being venerated by Pammachius and his wife Faustina, who transformed the house into a basilica. On the side-walls are groups of figures belonging, apparently, to historical scenes. One is a scene of martyrdom in which two men and one woman are represented kneeling, their hands tied behind their backs, receiving the mortal stroke from the lictors. De Rossi believes this to represent the martyrs Crispus, Crispinianus, and Benedicta, said to have been killed in Julian's persecution, shortly after SS. John and Paul, and to have been buried near their tomb.—*Not. d. Scavi*, 1887, p. 532.

VENEZIA.—*Piazza of San Marco.*—Excavations here have revealed the existence of a large well in the midst of the Piazza, apparently made in the xv cent. and closed at the beginning of the last century: it is estimated that it contains 10,000 cubic metres of sand brought from the shores of the Lido. This is the fifth ancient well discovered in the piazza, and the location of the sixth is known. They have been able to study the vast sewers of the x cent., the foundations of 1200 to 1400, and those of the buildings of Doge Ziani. Among the objects found during the excavation were some mosaic-tablets, teeth of a wild-boar, a mediæval bronze spoon, some unknown

coins, and a small block of green serpentine porphyry, the Lapis Lacedæmonius of the ancients.—*Cour. de l'Art*, March 30, from the *Adriatico*.

SPAIN.

ALCOLLARIN.—*Roman inscriptions.*—Several inscriptions with dialectic peculiarities had been found here. Two more have now come to light: one of a *Pellus Taltici filius*: another is interesting as containing the cognomen *Auge*: *Cornelia C. l. Auge, etc.*

ALMENARA (near Olmedo).—*Roman mosaic.*—D. Ven. M. Fern. de Castro has discovered on this site, which he considers that of *Nivariā*, a large mosaic of the late-imperial period, and, as the fact of a Roman settlement here is of great interest, the Academy has decided to undertake excavations.

CANALS (Valencia).—*Roman ruins.*—At this place, in the "cerca" of Jativa, have been found many columns of the Roman period, which prove the existence here of a large and magnificent edifice. Amphoræ and other vases and fragments of mosaics, also, have come to light.

ILlici.—*Roman antiquities.*—On the hill at Illici, the famous Roman colony, where remains of walls, pavements, marble slabs, fragments of vases, etc., indicate the centre of the ancient city, a tomb was recently found of peculiar and interesting construction.

SEVILLA.—*Discovery of a chapel.*—A discovery of great historical and architectural value has been made at the entrance of the cathedral. The ancient *Capilla de la Granada* has been found to contain, covered up by stucco and a false ceiling, the elements of a very early architecture. Already the chapel is shown to be sustained by a double row of columns with Latino-Byzantine, Arabic, and Roman capitals of peculiar form, and to have an ancient roof. Until the work of investigation is finished, it is not possible to decide whether this is a part of a Visigothic church, which, modified by the Almohades, served as an atrium to the splendid minaret, now called the Giralda, or whether it was a chapel of the Christian church raised on the ruins of the mosque at the time of the Conquest.—*Revue de Ciencias historicas*, 1887, pp. 391, 470, 477, 478, 482-84.

FRANCE.

CANCABEAU (Vaucluse).—*Gallic Tombs.*—The excavations carried on during the past year on the plateau of Cancabeau (commune of Château-neuf-de-Gadagne), described by M. Sagnier (*Les fouilles de Gadagne*, Avignon, 1888), have given interesting results. Twelve tombs have been discovered, several of which contained, beside the skeletons, truncated heads placed face downward. This detail shows a state of barbarism identical with that of the Gallic tribes that raised the monument of Entremont.

The objects excavated indicate that these tombs are posterior to the pre-historic period and anterior to the Roman dominion. The excavations are to be continued.—*Revue Critique*, 1888, No. 13.

CONSOIRE (Nord).—M. Jennepin has lately informed the Académie des Ins. et Belles-Lettres of discoveries made in that commune, at Boussignies and its vicinity. They consist of implements of the stone and bronze ages; Gallic coins of gold and of bronze; Roman coins; a small bronze statuette of Jupiter; numerous Gallo-Roman tombs containing vases and ornaments; also brick-kilns.—*Cour. de l'Art*, Feb. 17.

CRASVILLE-LA-ROQUEFORT.—While digging a grave in the communal cemetery, 50 gold coins were unearthed, at the depth of about 1.50 met., at the base of the foundation of an ancient nave, now destroyed, which formerly belonged to the Priory of Crasville: the coins were lying in a heap, without any receptacle. They are of the coinage of Charles V, VI, VII of France, and of Henry V, VI of England.—*Cour. de l'Art*, March 30.

PARIS.—The Académie des Inscriptions et Belles-Lettres has offered a prize of 20,000 frs. for a work on the History of the Graphic Arts in Antiquity up to Perikles (*Histoire des Arts du dessin jusqu'à Périclès*): the prize to be given in 1890.

M. SALOMON REINACH has been appointed on the committee of the Paris Exhibition for 1889 for the departments of History and Archæology.

MUSÉE DE SÈVRES.—M. BOURIANT, *Directeur de l'École Française d'Archéologie en Égypte*, and Dr. FOUQUET, of Cairo, have presented to the Musée de Sèvres a series of 275 specimens of enamels and ancient glass. This curious collection illustrates the progress and changes in the making of enamels and glass during three thousand years—from the seventeenth dynasty, seventeen hundred years before Christ, till the fifteenth century of our era.—*Athenæum*, March 3.

LATIN INSCRIPTIONS.—At a recent meeting of the *Acad. des Ins.*, M. de Villefosse communicated two Roman inscriptions, one proving the existence of a stone theatre at Fleurs, built under Claudius, about 42 A. D., at the expense of a priest of Augustus, replacing one of wood that had been erected by a certain Lupus son of Anthus. The second showed that the city of Digne, *Dinia*, was a Roman colony, whose inhabitants belonged to the tribe *Vollinia*.—*Revue Critique*, 1888, No. 4.

PERSAO.—*Merovingian Cemetery.*—Father de la Croix has discovered here the displaced remains of a Merovingian cemetery similar to those found by him at Civaux, Antigny, etc. He has unearthed fourteen covers of Frankish sarcophagi, put to modern use.—*Revue de l'Art Chrét.*, 1888, p. 94.

ROUEN.—*Tower of the Cathedral.*—An admirable drawing has been found of the spire of the Cathedral of Rouen, burnt on Oct. 4, 1514. Two con-

tradictory inscriptions are on the parchment. One, of c. 1500, reads: *Ancienne Piramide de Notre-Dame de Rouen, qui fut bruslée en 1514, le 4 Octobre, à six heures du matin.* This is doubtless correct, and the other, more recent, inscription must be incorrect, which says: *l'Ancienne pyramide attribuée à l'Archevesque Maurille, haute de 547 pieds de France à prendre du rez-de-chaussée à monter jusqu'au coq. Le tout en pierre, qui fut renversé en 1117 par la foudre.* The drawing is that of a work of the close of the xv or the first years of the xvi century, showing that the tower could not have been built long before the fire, while the beauty of its design shows it to have been done by a fine architect.—*Revue de l'Art Chrét.*, 1888, p. 132.

ROUEZ-EN-CAMPAGNE (Sarthe).—*Ancient Temple*.—The discovery has been made, in the fields of *La Frétière*, of an ancient temple complete in all its parts. It is 30 met. long by 16.65 wide, was preceded by a portico with colonnades, and divided in the interior into three naves formed by columns whose bases have been found. Under an *aedicula* surrounded with columns, at the entrance of the temple, have been found many Roman coins.—*Bull. Mon.*, Nov.-Dec., 1887.

SAINT-CYR-SUR-LOIRE.—*Gothic Sculptures*.—In this small church, originally built in the xi century, though it now belongs mainly to the xv, there have been found two wooden statues, under life-size, representing the Virgin and St. John, which have the characteristics of the xiii century. Their probable position on posts led to their being made excessively slender and straight. They are painted.—*Revue de l'Art Chrét.*, 1888, p. 77.

SAINTES.—*Excavations at the hospital*.—The discoveries announced on p. 492 of vol. III have been continued. The fortifications uncovered along a length of about 200 metres show various periods in their construction. The upper part composed of enormous blocks taken from Roman building, some of which must have been of large dimensions, was built at two different periods: the lower part is of Roman construction. From the upper part, among fragments of bronzes, statues, bits of pilasters, there are remarkable inscriptions of the first century, sepulchral cippi, columns and capitals of various periods and styles, fine fragments of friezes and sculptured entablatures. The city has opened a museum to receive them.—*Bull. Mon.*, Nov.-Dec., 1887.

VALCABRÈRE.—*Christian Inscription*.—The following inscription was lately found on one of the buttresses of the church: *DEPOSITIO [IN] P SEVERINI XV K MR | VALERI . . .* It is a Christian inscription belonging to the end of the fourth or the beginning of the fifth century, and to be connected with that of Valeria Severa, dated 347 A. D., found in the same church.—*Bull. Mon.*, Nov.-Dec., 1887.

SWITZERLAND.

GREAT SAINT BERNARD.—*Temple of Jupiter Peninus.*—Five more inscriptions belonging to the famous temple of Jupiter Peninus have come to light. They are on small bronze tablets. One of them is interesting because it gives the full reading *Dominabus*, thus solving any doubts as to the restoration of this word in other inscriptions, as well as those expressed by Max Ihm regarding the relation between the worship of the *Dominae* and the *Matronae* (cf. IHM, *Der Mütter-oder Matronenkultus und seine Denkmäler*: Bonn, 1887, p. 98). The inscription reads: M CALPVRNVS|VETERANVS|DOMINAPVS|V. S. L. M.—*Not. d. Scavi*, 1887, p. 467.

HOLLAND.

Prehistoric Station in the Zuiderzee.—The Marquis de Monclar has found in the Zuiderzee, near Muiderberg, between Muiden and Huizen, an interesting prehistoric station, comparable with that of greater extent found more than thirty years ago at Hilversum. The objects found all belong to the age of polished stone, and illustrate all its stages from the stone left nearly in its natural condition to that worked into perfect celt form: their execution is extremely rude.—*Bull. Mon.*, Nov.–Dec., 1887.

GERMANY.

BERLIN.—*Corpus Inscriptionum Latinarum.*—Tome XIV of this *Corpus* has just been published by Dr. Hermann Dessau: it includes the inscriptions of Ostia, Tusculum, Praeneste and Tibur, that is, those of *Latium Vetus*. The work of this great *Corpus*, undertaken by the Academy of Berlin, will soon be finished. Tome XI, containing *Æmilia*, *Umbria* and *Etruria*, is in the press; also part 4 of t. VI (*Roma*) and t. XV (*Inscriptiones instrumenti domestici urbis*): t. XII, including the inscriptions of *Gallia Narbonensis*, is on the point of being published, while t. XIII (three Gauls and two Germanys) and pt. 6 of t. VI are in preparation. A new edition of t. I is being prepared; also supplements to tomes II, III, IV, VIII.—*Gazette Arch.*, 1888, Nos. 1–2.

Corpus Inscriptionum Atticarum.—The second fasciculus of the supplement to the *Corpus* (vol. iv) has been published by Professor Kirchhoff: it contains the inscriptions anterior to Eukleides discovered between 1877 and 1886.

Gifts to the Collection of Coins.—The Archaeological Society has donated to the Coin-Collection, established at the University, all the ancient coins in its possession, numbering 289 gold, 1,244 silver, 21,407 bronze coins.—*Berl. phil. Woch.*, 1887, No. 46.

KREIMBACH (near).—*Roman Fortress*.—The middle Lauterthal, near Kreimbach and Wolfstein, has been noted for over a century as a mine of Roman antiquities. In September, C. Mehlis visited and explored the rocky plateau called by the people the "Heidenburg," probably a Roman fortress, from which these antiquities evidently came. It is in the shape of an ellipse with a maximum (S. W.—N. E.) diameter of 185 met., and a minimum (N. W.—S. E.) diameter of 75 met. The many antiquities found in and around the graves belong to the third and fourth centuries A. D., its erection having apparently taken place about the middle, its destruction at the end, of the latter century. The fortress served the double purpose of protecting the Roman line of march and guarding against incursions of the Franks and Alamanni.—*Berl. phil. Woch.*, 1887, Nos. 45, 50.

OBRIQHEIM (Palatinate).—*Frankish Cemetery*.—The excavations at the Frankish Cemetery of Obrigheim on the river Eis, between Worms and Eisenberg, which had already yielded interesting results (*cf. Wochenschrift*, 1887, Nos. 25, 26) were resumed during November. The contents of each grave are enumerated in *Berl. phil. Woch.*, 1888, Nos. 5, 6, beginning with No. 48, in continuation of the numeration commenced with the first excavations. The men's graves contained arms—such as iron lances, bronze buckles, iron daggers, knives—metal ornaments, and glass cups. The women's graves contained decorated belts, objects for the toilet, black urns, and glass cups. The finds show that the cemetery belongs to two distinct divisions of the Frankish epoch: while the first may be placed in the sixth century (Coins of Totila), the second, to which a double tomb covered with slabs belongs, is to be considered as Carolingian and of the eighth century. This opinion is strengthened by analogous discoveries at Niederkirchen and Deidesheim, as well as at Michelsberge near Durkheim. To the latter period belong many objects in pottery which show a great decadence in form, color and decoration.

ZAKRZEW (Prussian Silesia).—*Roman Tombs*.—At a meeting of the *Acad. des Ins. et Belles-Lettres*, Nov. 25, was announced the discovery at Zakrzew, on the Oder, near Breslau, of three tombs, dating apparently from the first centuries of our era, which contain objects that seem to be of Roman origin. The tombs are large rectangular cases, formed of slabs of granite (2.50 by 2.25 met.), and contained a large number of silver and gold jewelry, utensils and ornaments in bronze and glass, several fibulae and a gold Roman imperial coin (IMP. CLAVDIVS AVG).—*Rev. Critique*, 1887, No. 49.

AUSTRIA-HUNGARY.

ILLINICA (near Czernowitz).—*A Roman camp*.—A well-preserved Roman camp has been found here, surrounded by earthworks 600 m. long by 200

m. wide. Bronzes, terracottas, and other objects, have come to light in great quantities.—*Berl. phil. Woch.*, 1887, No. 47.

DENMARK.

RIBE.—*Cathedral.*—The noble cathedral of this place is threatened with destructive restoration. Pastor Helm, who is the author of a fine folio volume on the history and architecture of this church, has issued an appeal to the Danish Government to save Ribe from ecclesiastical vandalism. The controversy for and against restoration is filling the Danish newspapers. One proposal is to rebuild the great tower which fell in on Christmas Day, 1283.—*Athenæum*, Feb. 18.

SWEDEN.

UPSALA.—*Restoration of Cathedral.*—The restoration of the Cathedral of Upsala, the oldest edifice of this kind in Sweden, which has been in progress for some years, is approaching completion. The work which involves the rebuilding of the principal tower, destroyed by fire many years ago, is being carried out under the supervision of Herr F. Langlett, architect of the Swedish Government, and a sum of £10,000 has already been spent.—*Builder*, Nov. 19.

RUSSIA.

SMYELA (near) (Govt. of Kieff).—*Excavation of mounds.*—*Mounds* [*kurgani*] and *Occasional Archæological Finds near the Hamlet of Smyela* is the title of a diary kept, during the space of five years, by Count ALEXEI BOBRINSKY, and now published with two maps and twenty-four plates. Between 1879 and 1885 Count B. investigated fifty-three mounds in the vicinity of Smyela, in the south of the Govt. of Kieff, chiefly by sinking shafts, sometimes thirty-two feet in diameter, through the centre of the mound, from its summit to its base. Everything that was met with was carefully noted, as well as its position in the mound. In most cases, the lofty mounds had served as the burial-place for two different tribes, separated from each other by a great period of time and a noticeable difference in culture. The first inhabitants of the place dug a grave, covered it with a wooden framework, and heaped above it a lofty, pointed hillock. Three or four graves, generally of the same epoch, were apt to be found under one mound: in them lay people with remarkably long skulls. As a rule, there were found no objects pertaining to daily life, but sometimes flint arrows and knives, or lumps of pigment for tattooing; occasionally, the bones of the mole and other small rodents. The succeeding race buried their dead on top of the first. Their skulls are of a form entirely different from the preceding, and objects of bronze and bits of clay vessels are met

with in their graves; all of which points to a different nationality. Quite another race was revealed by the examination of one among several hundred low mounds crowded together. This people had bronze and iron implements, held intercourse with the Greeks of the seacoast colonies, and did not place the bones of moles *etc.* in their graves, like the two previous tribes. Bits of colored stuffs still lay on some of the skeletons, fragments of galloons, and even brass knee-caps, such as were used by the Greeks.—*Nation*, March 29.

ENGLAND.

LONDON.—*New Archaeological Review*.—The first number has appeared of the new *Archæological Review: a Journal of Historic and Pre-historic Antiquities*, edited by Mr. G. L. Gomme and published by David Nutt. The general subject is divided into four sections: anthropology, archæology proper, history, and literature; and under each of these sections are given original articles, reviews, correspondence, index notes, *etc.* The several indexes to papers scattered among the *Transactions* of archæological societies promise to form a valuable feature. A large share of the space will evidently be devoted to Prehistoric archæology, and, though Oriental and Classical archæology will not be entirely neglected, they will be introduced, apparently, only in so far as they relate to the antiquities of Great Britain. It is somewhat of a disappointment to find that the new Review has so limited a geographical horizon. It still leaves the field open to an English review that shall make the world of archæology its own.

Sale of Kypriote Antiquities.—Messrs. Sotheby were to sell, on March 12, 13, 14, another portion of the valuable collection of Kypriote antiquities formed by Major di Cesnola, and now the property of Mr. E. H. Lawrence.—*Academy*, March 10.

BRITISH MUSEUM.—During the year 1887, the Department of Coins and Medals has acquired 176 Greek and 30 Roman coins: of these, 11 are of gold, 83 of silver, 86 of bronze, 26 of *billon*. Mr. WARWICK WROTH will publish the most important acquisitions in the Greek class in Part I of the *Numismatic Chronicle* for 1888.

Catalogues of Gems and Vases.—The Trustees will shortly issue a new catalogue of the national collection of gems, compiled by Mr. A. Smith under the superintendence of, and with the assistance of, the Keeper of Greek and Roman Antiquities. It will be illustrated with autotypes of representative examples. The same authorities are about to publish a new handbook to the collections of the Greek, Etruscan, and other ancient vases.

Rearrangement.—The vases and bronzes belonging to the British Museum are now almost entirely rearranged according to systematic principles calculated to facilitate study of and reference to the works.

The placing the collection of Roman mosaic-pavements on the walls of the staircase leading from the Egyptian Gallery to the upper story is making rapid progress, with the excellent result that these magnificent mosaics may be adequately seen for the first time.

It has been decided to use marbles of fine and delicate greens, with bold Greek base-mouldings, for the pedestals of the statues from the pediments of the Parthenon now grouped in the Elgin Room. A new arrangement of these sculptures will obviate the defects of the present system.

Prehistoric Section.—An important addition has recently been made to the prehistoric section of the British Museum. Some years since, M. Peccadeau de l'Isle made excavations on the banks of the river Aveyron, at Bruniquel, opposite to the cavern explored by the Vicomte de Lastic, whose discoveries at this place formed the subject of a valuable paper in the *Philosophical Transactions* by Sir Richard Owen. The collection of M. Peccadeau de l'Isle has just been acquired by the trustees of the Christy Collection and presented by them to the British Museum, thus greatly enriching the national collection of the reindeer period, which is now probably unrivalled, even though some of the choicest objects found by Messrs. Christy and Lartet were presented, by desire of Mr. Christy, to the French Government. The most interesting specimens found by M. Peccadeau are a number of outlines of animals on stone, hitherto not represented at the Museum, and the three well-known sculptures in the round, probably the handles of instruments, of which two are in mammoth ivory and represent reindeer, while the third, representing a mammoth, is in reindeer horn. These are temporarily shown in the gallery on the upper floor of the Museum, in the room from which the glass collections have been removed.—*Athenæum*, Jan. 21, Mar. 3.

SALISBURY.—Mr. Nicholls writes to the *Standard* of Feb. 12, that some workmen, excavating in the garden of his house at Salisbury during the preceding week, found a large Roman mosaic-pavement which, from his description, is evidently a copy of the mosaic at Naples representing the battle of Issos.—C. S. in *Class Review*, March, 1888.

SPRINGHEAD.—*Find of Roman Coins.*—A hoard of 114 coins, chiefly of *billon*, extending from Gordian III to Tetricus II, has recently been discovered at Springhead, near Gravesend. Mr. C. R. Smith has given a detailed notice of the hoard in the *Numismatic Chronicle* (1887, pp. 312 f.).—*Class Review*, March, 1888.

AMERICA. UNITED STATES.

Survey of Western Mounds.—During the open-air season of 1887, Mr. T. H. Lewis surveyed over 1160 prehistoric mounds, in Minnesota, Da-

kota, and Wisconsin. Besides these tumuli he met with six ancient enclosures or "forts" of varying size, which he also surveyed—four of them are situated in Minnesota, and two in Dakota.

BOSTON.—*Recent acquisitions by the Museum of Fine Arts.*—Among the acquisitions of the Museum for the past year, the following are mentioned in the last annual report. (1) *Egyptian Antiquities.*—A liberal donation from the Egypt Exploration Fund from the finds of 1885 and 1886, comprising hundreds of objects in bronze, pottery, glass, and stone. Among these are a colossal statue of Rameses II, in black granite; a relief in limestone, the head of a young prince, most delicately modelled, which was found built into a pylon of the VI century B. C.; a handle of gold; glass mosaics of microscopic delicacy of execution; a set of the deposits placed under the foundations of Egyptian temples. (2) *Bronze Statuette of Athena.*—Mr. Samuel D. Warren donated a bronze statuette of Athena discovered in 1871 on the Ettringer Bellerberg between Coblenz and Bonn, on the Rhine, among ruins conjectured to be those of a temple of Minerva. The statuette (15 cent. high) represents the goddess standing, wearing a helmet "and an aegis of large size, which envelops the upper half of the figure like a shawl, the two ends being held together across the breast by the Medusa-head which serves as a kind of clasp. In her left hand she held a spear, in a nearly vertical position," and in the right probably a patera (?) of which nothing remains. The date is probably the second century of our era. In type, "it possesses all the distinctive characteristics of the type of Athena which prevailed about the middle of the fifth century B. C.," i. e., the "Attic" helmet, the broad face, and the large aegis, and it seems to be the reproduction of a large statue of the Attic School of that period. (3) *Myrina Terracottas.*—Mr. Martin Brimmer gave a collection of twenty-nine original Greek terracotta figures from the site of Myrina, in Asia Minor, where over 1200 figures were brought to light by the excavations of the French School. "The collection presented by Mr. Brimmer is admirably characteristic of the types and styles of the Myrina potters." Most of the statuettes were intentionally broken when thrown into the tombs, but a few "appear to have had a more strictly religious significance. Such are two sitting statuettes of Aphrodite, of a very early and primitive type, in which the influence of the Orient is strikingly apparent. Both are fully draped, with movable arms, like those of a jointed doll, and enormous headdress, the types of which are strongly suggestive of Phœnician art, as are also the necklaces, bracelets and other adornments with which they are bedecked. One of these figures is intact, the other shows what I think are recent breaks, the lines of the fractures being sharp and fresh. . . . I am led to believe that . . . they were the household idols of the deceased, and were placed carefully in the graves to be a pro-

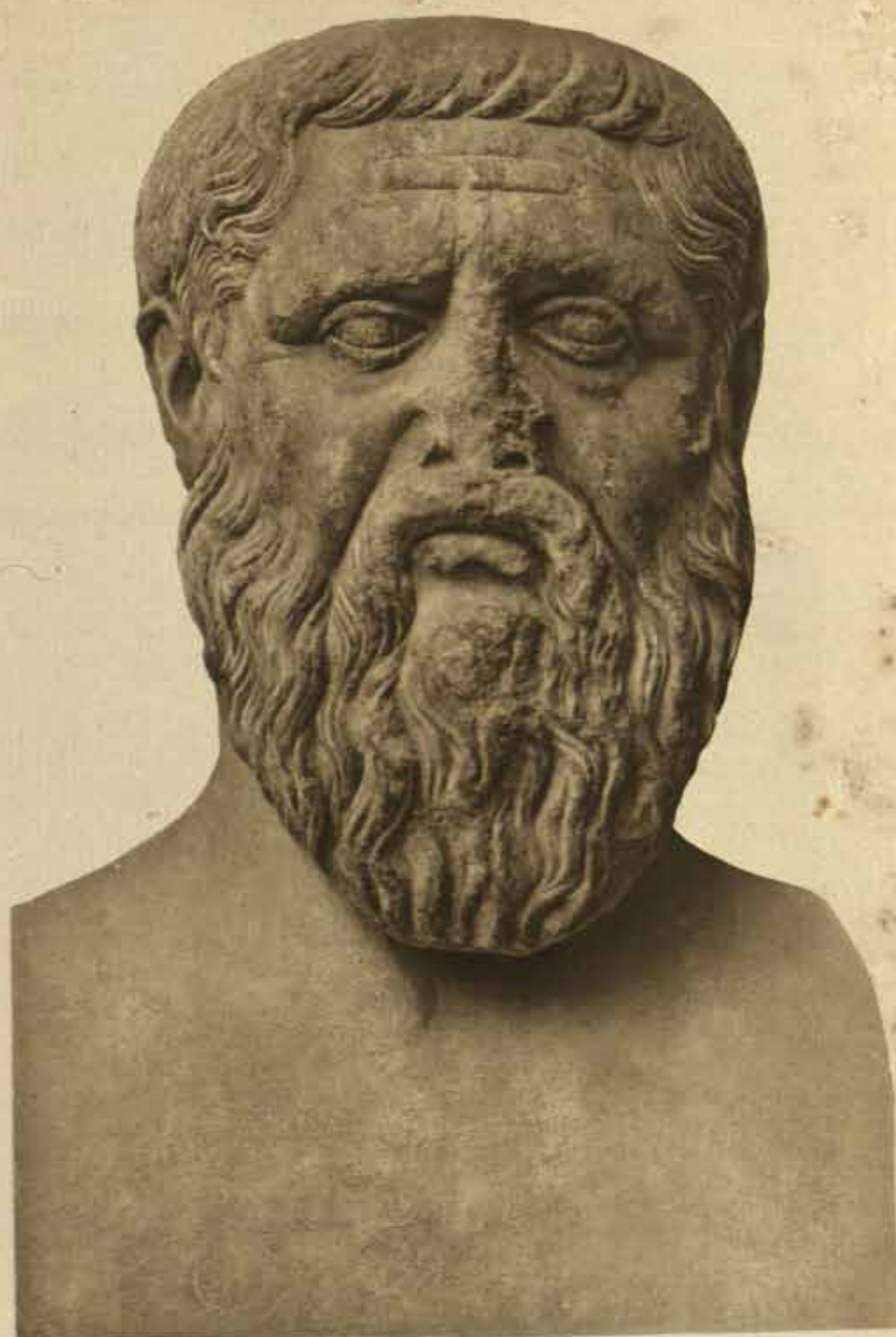
tection in death as they had been in life. Of the other figures, some are divinities, some are human. There are two of Aphrodite, of types not earlier than the fourth century B. C., one of which has the word ΔΙΦΙΛΟΥ, the name of the maker, inscribed on the back; two Nikes in full motion, the wings unfortunately lost; one youthful Dionysos; three Satyrs; four flying Cupids; and one Muse." (4) A beautiful Greek bracelet of gold, and three small gold ear-rings, from Asia Minor. (5) A bronze head of Hypnos, of life-size, of fine workmanship, and of a style which points to a Greek origin. It was purchased by Mr. E. W. Longfellow at Assisi, and was said to have been found a short time before at Todi. (6) A terracotta figure of a seated woman, from Asia Minor, and 13 small terracotta figures from the Island of Kos.—MR. EDWARD ROBINSON, from the *Twelfth Annual Report, to the Trustees of the Museum of Fine Arts, for the year ending Dec. 31, 1887.*

Professor KÉKULÉ of Bonn has been named corresponding member of the Royal Italian Academy of the Lincei. Marquis HERVÉ DE SAINT-DENIS has been elected president of the Académie des Inscriptions for 1888; the same body having also named corresponding members Dr. BÜHLER (in place of Professor Pott), Professor HELBIG (in place of Professor Henzen), Professor SICKEL (in place of Gozzadini), JOHN EVANS (in place of Henry Rawlinson). Professor BRUGSCH has been named corresponding member of the R. Academy of Sciences in St. Petersburg. The Berlin Academy of Sciences has appointed, as corresponding members, Messrs. HOMOLLE in Paris, BYWATER in Oxford, and KABBADIAS in Athens. A travelling fellowship of £150 has been granted to the vice-director of the Fitzwilliam Museum in Cambridge for archaeological researches in Kypros. Professor PETERSEN has been appointed secretary of the German Institute in Roma, and is replaced at Athens by Dr. W. DÖRPFELD, the second Athens secretary being Dr. PAUL WOLTERS.

A. L. FROTHINGHAM, Jr.

BOOKS RECEIVED.

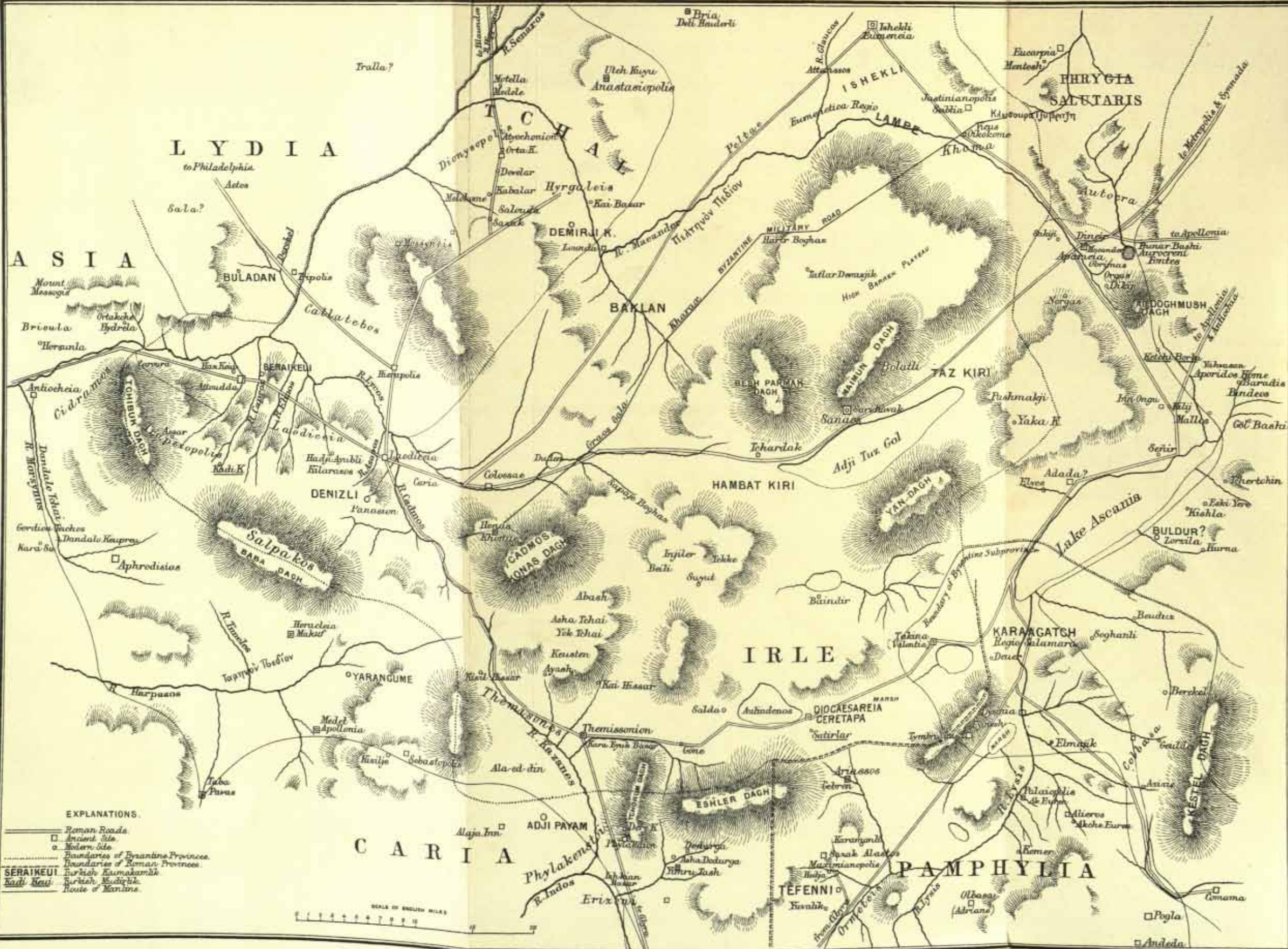
- ALBERT DUMONT et JULES CHAPLAIN.** *Les Céramiques de la Grèce propre. Vases peints et terres cuites.* Première partie, 4^e fascicule. *Vases Peints.* 4to, pp. 245-338; pls. XXIII-XL. 1887, Paris, Firmin Didot.
- MASSACHUSETTS INSTITUTE OF TECHNOLOGY.** *Architectural Review.* Vol. I, Nos. I, II. 10 Plates, Imp. 4to.
- LOUIS MÉNARD.** *Histoire des Israélites d'après l'exégèse biblique.* 12mo, pp. 252, with map and illustrations.
Histoire des anciens Peuples de l'Orient. 12mo, pp. 668, with more than 500 illustrations of the monuments.
Histoire des Grecs. 12mo, 2 vols., pp. 1032, with numerous illustrations of the monuments. Paris, Ch. Delagrave, 15 rue Soufflot.
- EUGÈNE MÜNTZ.** *Les Collections des Médicis au xv^e siècle. Le Musée—La Bibliothèque—Le Mobilier* (Appendice aux Précurseurs de la Renaissance). 4to, pp. 112: édition tirée à 350 exemplaires, prix, broché, 10 frs.; relié, 20 frs.; 25 exemplaires sur Hollande numérotés, 20 frs. 1888, Paris, Libraire de L'Art, 29 cité d'Antin.
- OLIVIER RAYET and MAXIME COLLIGNON.** *Histoire de la Céramique grecque.* Imp. 8vo, pp. XVII, 409: 145 figures in text, 16 plates outside of text. 1888, Paris, Georges Decaux, libraire-éditeur, 7 rue de Croissant.
- Resoconto delle Conferenze dei Cultori di Archeologia Cristiana in Roma dal 1875 al 1887.* 8vo, pp. xi, 393. 1888, Roma, Tipografia della Pace.

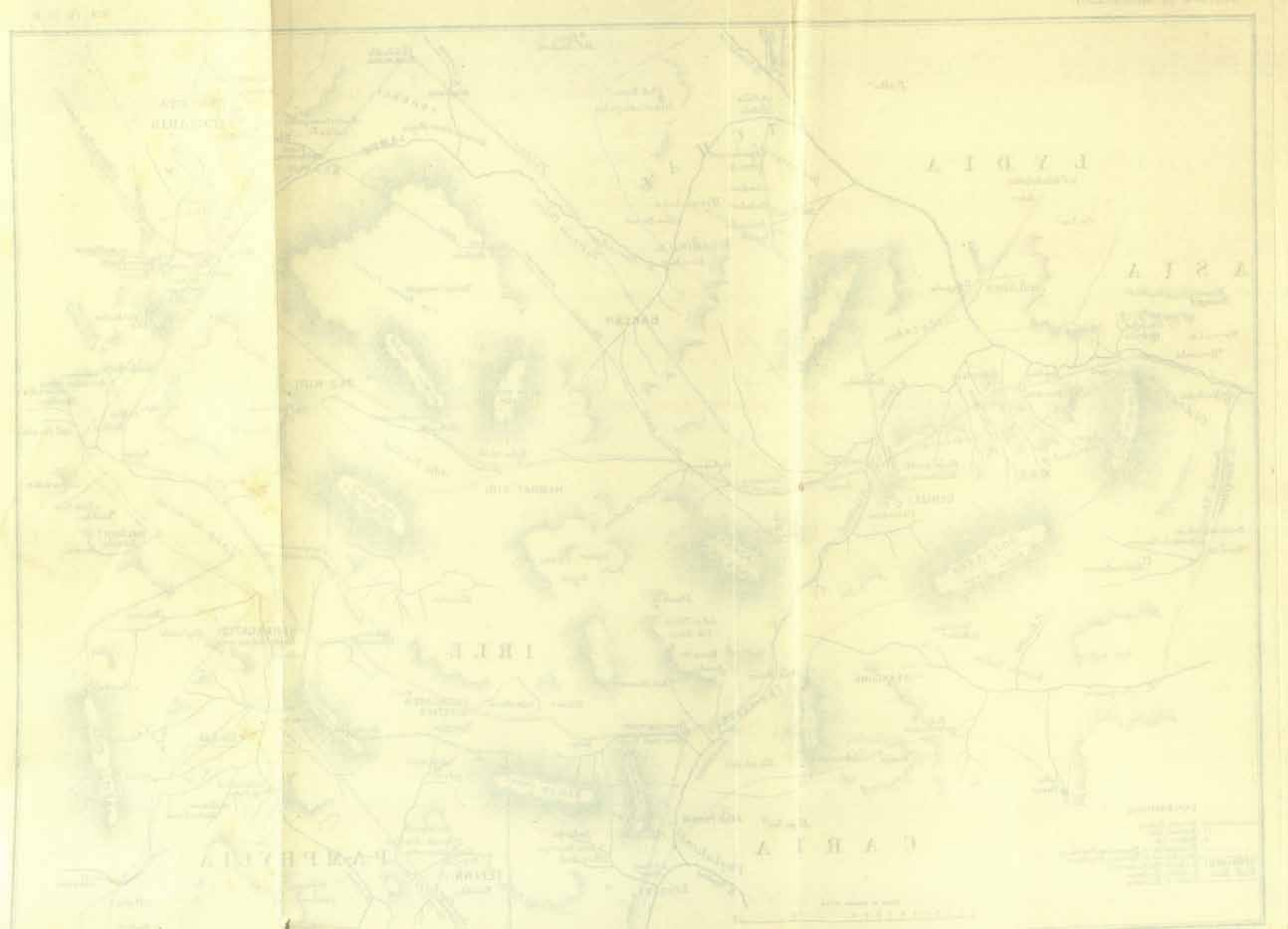


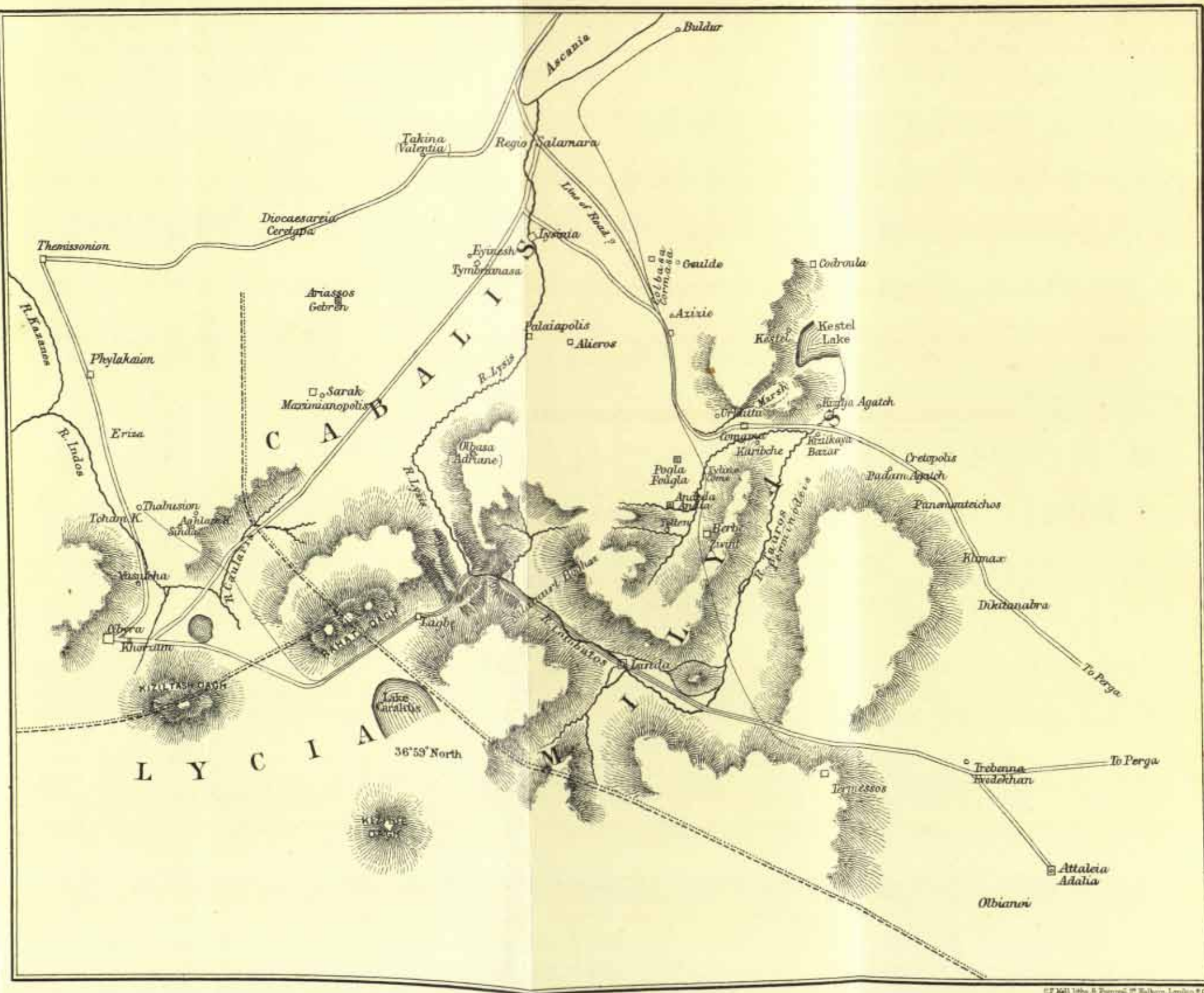
Hallé & Dujardin

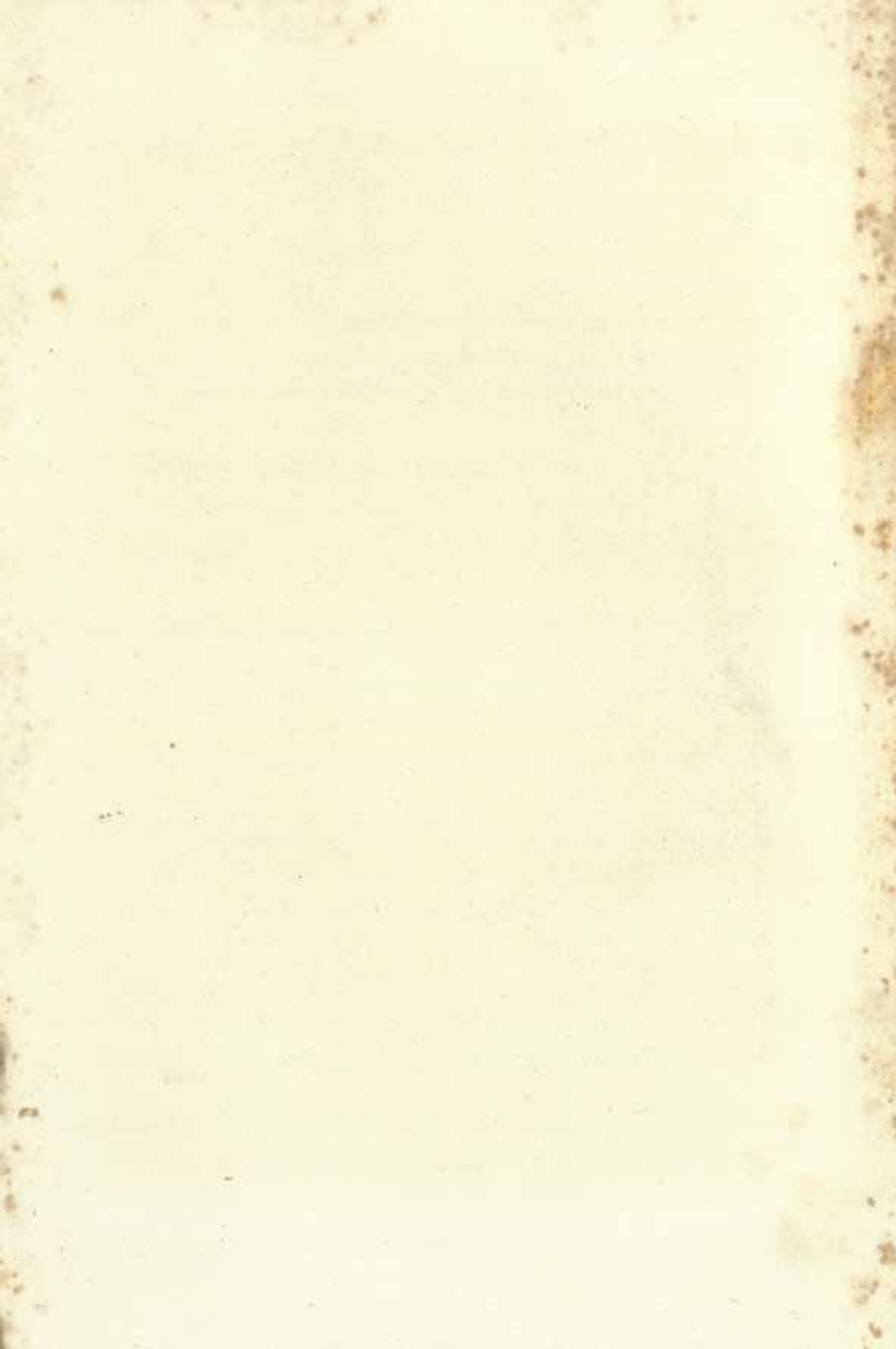
PORTRAIT-HEAD OF PLATO

in the Museum of the Louvre











PL. IV, No. 2.

PL. V, No. 2.

REVERSE.

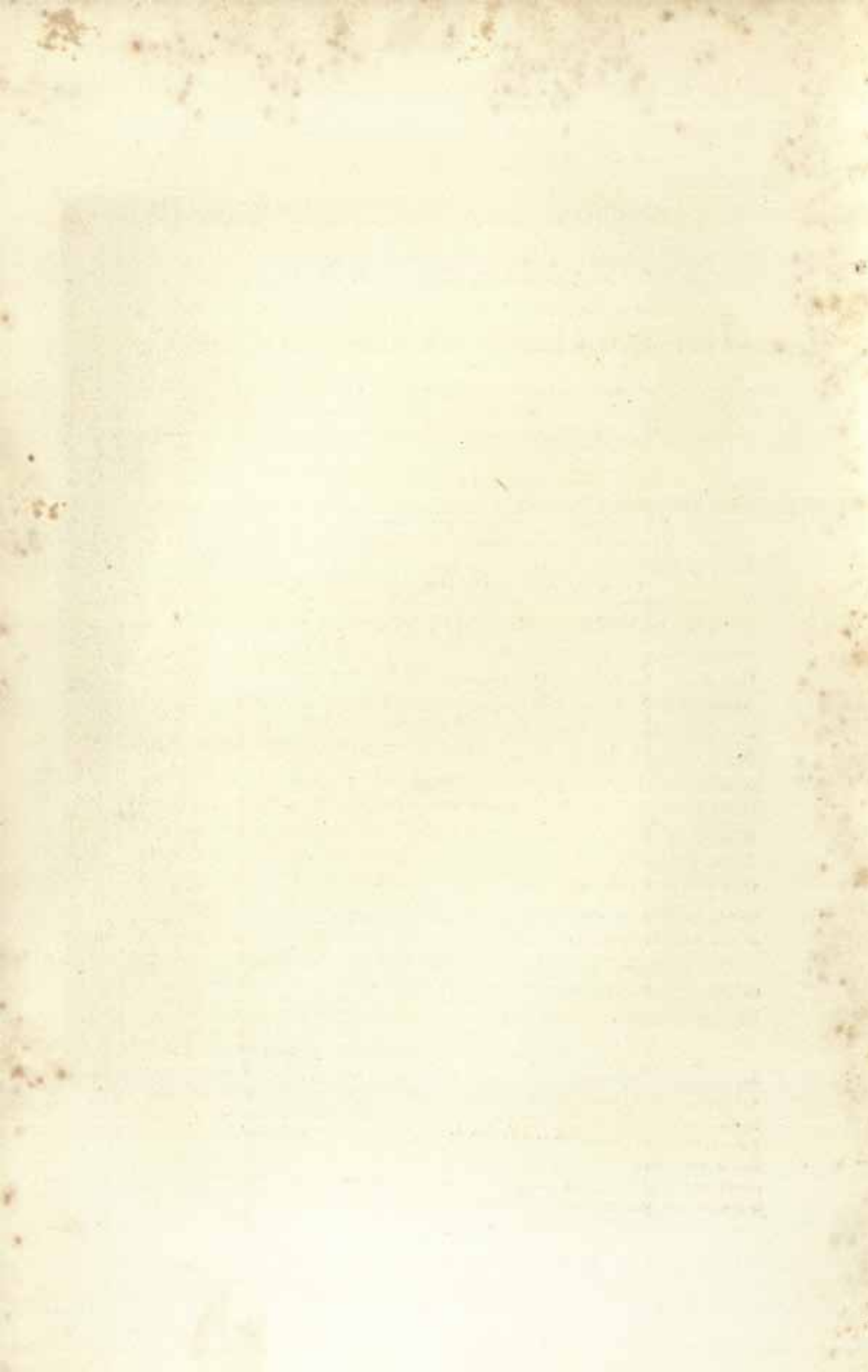
TWO STONE TABLETS WITH HIEROGLYPHIC



PL. IV, No. 1.

PL. V, No. 1.

OBVERSE.



AMERICAN JOURNAL OF ARCHÆOLOGY.

VOL. IV.

No. 2.

NOTES ON CHRISTIAN MOSAICS.

III.

THE LOST MOSAICS OF THE EAST.

In the study of mosaic-painting, only the works executed in Western churches have been studied with care, so that the development of this branch of art in the East is practically unknown. While every remaining specimen in Roma, Ravenna, Milano, and other centres of art, where the mosaicists have left us examples of their work, is made the subject of investigation, and records are ransacked to find memorials of all that have been destroyed, the fact seems to have been overlooked, that in the East there was an almost unbroken series of mosaics from about the time of Constantine to the close of the Middle Ages, some still existing, many more destroyed. It is to be hoped that photographs and drawings may be made of the works that still exist, most of which are practically inedited,¹ and many are subject to a constant dilapidation.

It is with the hope of calling attention to this subject, rather than of treating it satisfactorily, that I publish these notes. The following list includes the greater part of the mosaics still remaining, to my

¹These photographs could not be taken without difficulty in cases where the mosaics are in a church converted into a mosque, but that this difficulty is surmountable has been shown by the photographs of P. Sebah, published two years ago, of the mosaics in the Kachriye Djami (Ch. of the Saviour) at Constantinople (monograph by MM. LEVAL, MUHLMANN and WEGNER: *cf. Bulletin Monumental*, 1886, pp. 384-92). When this is impracticable, a careful and critical description would to a certain extent take the place of illustrations, for a great disadvantage, in the case of many of these mosaics, is that we are ignorant even of their subjects, and have no indication of their age.

knowledge, in churches of the East and of Greece: being a first attempt, it is necessarily incomplete. Some works are omitted, whose present existence is not certified, though seen by early travellers, like Pococke (*A Description of the East*) and Terzi (*Siria Sacra*).

EXTANT EARLY-BYZANTINE MOSAICS, V-IX CENTURIES.

Tunisia: Tomb-slabs, baptismal fonts, etc., decorated with mosaics.²

Carthage: Mosaic of Sta. Perpetua (?) (Museum of Mt. Byrsa).³

Tyre: Pavement of an early church (Museum of Louvre).⁴

Thessalonike: Ch. St. George; mosaics of dome, attributed variously to the IV, the V and the VI century.⁵

Constantinople: Basilica of Sta. Sophia; mosaics of Justinian, Basil the Macedonian, John Palaiologos, and other emperors.⁶

Thessalonike: Ch. of Sta. Sophia; mosaics of dome and apse, attributed to the time of Justinian.⁷

Constantinople: Basilica of Sta. Eirene, now an arsenal, but still full of early mosaics.⁸

Mount Sinai: Church of the Transfiguration; mosaic in the apse, attributed to the VI century.⁹

Damascus: Basilica of St. John Baptist (now the Great Mosque), still retaining Byzantine mosaics anterior to Arabian conquest.¹⁰

² *American Journal of Archaeology*, I, p. 423; *Bulletin Monumental*, 1884, p. 131; *Bull. trim. Antig. Africaines*, 1885-86.

³ *American Journal of Archaeology*, I, p. 223; *Bull. Arch. Crist.*, 1884-85, pp. 44-52; *N. Y. Nation*, Jan. 1, 1885.

⁴ LABARTE, *Les Arts industriels*, II, 350; *Annales archéologiques*, t. XXIII, p. 278; t. XXIV, pp. 5, 205; GERSPACH, *La Mosaïque*, p. 73; BAYET, *Recherches pour servir à l'hist. de la peint. et de la sculpt. chr. en Orient*, 1879, p. 79; *L'Art Byzantin*, figs. 5, 6.

⁵ TEXIER et POPPLEWELL-PULLAN, *Architecture Byzantine*, 1860, p. 142, pl. XXX-XXXIV; *Ersch u. Gruber*, LXXXIV, 407; DUCHESNE et BAYET, *Mémoire sur une mission au Mont Athos*, 1876; WOLTMANN, *Geschichte der Malerei*, I, 176.

⁶ SALZENBERG, *Altchristl. Baudenkmäler von Constantinopel*; LABARTE, *Arts indust.*, II, 348; SCHNAASE, *Gesch. d. bildenden Künste*, III, 202; PAULUS SILENTIARIUS, *Descr. S. Sophiae*.

⁷ TEXIER et POPPLEWELL-PULLAN, *op. cit.*, p. 154, pls. XI, XII; DUCHESNE et BAYET, *op. cit.*

⁸ *Revue Archéologique*, XVIII, 2: 1868.

⁹ GARBUCCI, *Storia dell' Arte Cristiana*, tav. 268; LABORDE, *Voyage de l'Arabie Pétrée*, 1830, p. 67.

¹⁰ DE VOGÜÉ, *Voyage au Mont Athos*; *Gazette des Beaux-Arts*, 1875; KER PORTER, *Five years in Damascus*, p. 24.

Ch. of St. Zacharias (Mosque of Malek Daher?).¹¹

Nicaea: Ch. of the Virgin; mosaics in the dome, apse, and porch, of time of Constantine VII (790-97).¹²

Jerusalem (near): Ch. of the Holy Cross.¹³

EXTANT LATE-BYZANTINE MOSAICS, X-XIII CENTURIES.

- GREECE: *Daphne*; Church.¹⁴ } Mosaics executed probably
Mount Helikon; Church of } under Emp. Constantine Por-
 St. Luke.¹⁵ } phyrogenetos (911-59).
Island of Chios; Ch. of St. Basil, built and decorated by
 Constantine Monomachos (1042-53).¹⁶
Bethlehem: Basilica of Nativity; mosaics executed under Manuel Kom-
 nenos (1169).¹⁷
Jerusalem: Ch. of the Holy Sepulchre; mosaics executed, at time of
 Crusades, by Greek artists.¹⁸
Mount Athos: Convent of Xenophon.¹⁹
 Convent of Vatopedi.²⁰
Constantinople: Ch. of the Saviour (Kachriye Djami).²¹
 Ch. of Pantocrator; pavement.²²
Kiew: Cathedral of Sta. Sophia.²³

¹¹ DE VOGÜÉ, *Voyage, etc.*; PORTER, *op. cit.* p. 26; TERZI, *Siria Sacra*, p. 126.

¹² BAYET, *L'Art Byzantin*, p. 145; TEXIER, *Asie-Mineure*, I, 51; *Le Belles del Bosforo*, 1841, p. 278 (cf. SESTINI; VON HAMMER, *Constantinopolis und der Bosporos*, 1822; POCOCCO, *op. cit.*); DURAND, *L'Étymologie*, p. 22.

¹³ DE VOGÜÉ, *Les Églises de la Terre-Sainte*: Paris, 1860: ch. IX, § IV.

¹⁴ KUGLER, *Handbook*, I, p. 84.

¹⁵ LABARTE, *op. cit.*, I, p. 99; DIDRON, *Manuel d'iconographie*, pp. 425, 454; BAYET, *L'Art Byzantin*, pp. 144-5.

¹⁶ ÉMÉRIC-DAVID, *La peinture au Moyen Age*, p. 126.

¹⁷ QUARESIMUS, *Elucidatio Terrae Sanctae* (Antwerp, 1629), t. II, p. 645; CIAMPINI, *De Sacris Aed.*, pp. 150-62; DE VOGÜÉ, *Les Églises de la Terre Sainte*, p. 66.

¹⁸ DE VOGÜÉ, *op. cit.* p. 188; QUARESIMUS, *op. cit.*, II, p. 368.

¹⁹ DUCHESNE et BAYET, *op. cit.*

²⁰ DUCHESNE et BAYET, *op. cit.*, p. 300; *Annales Archéologiques*, t. V, p. 152.

²¹ Monograph by MM. LEVAL, MUHLMANN and WEGNER, with 41 photos. by P. Sebah: Constantinople, 1886. CARON, *Bulletin Monumental*, 1886, pp. 384-92; LEVAL and MUHLMANN, *Archiv f. kirchliche Kunst*, 1886, Nos. 9-12.

²² MÜNTZ, *Notes sur les Mosaïques chrétiennes de l'Italie* (*Revue Archéologique*, 1877, III, p. 9); SALZENBERG, *op. cit.*, p. 36.

²³ GERSPACH, *La Mosaïque*, p. 216.

*Small portable mosaics, in one or many compartments, executed at Constantinople between the XI and XIII centuries.*²⁴

Firenze: Opera del Duomo.

London: South Kensington Museum.

Paris: Museum of Louvre.

Roma: Christian Museum at Vatican; Palazzo Borghese.

Mount Athos: Convents.

St. Petersburg: Basilewski Collection.

Venezia: San Marco; S. Maria della Salute.

Etc., etc.

The description of the mosaics just enumerated, I shall leave to a later date, confining my remarks at present to some of the mosaics that have perished, and referring first to those that adorned secular buildings, afterwards to those placed in churches.

SECULAR MOSAICS.

One of the most interesting features of Byzantine art was its long continuation for secular purposes and with secular subjects, in the Imperial service and for its glorification. In the West, art soon ceased to be employed in anything but the service of the Church, in the erection and adornment of splendid houses of worship, so that the study of early mediæval monuments is simply a study of ecclesiastical art. But, in the Byzantine Empire, Cæsarism affected even art: the continuity and supremacy of the Imperial power kept alive the traditions of secular art as an inheritance from the Roman emperors.

As we read the Byzantine records, we often wish that some of the palaces, with their rich architectural forms, their wealth of marble and bronze statues, mosaics, marble pavements and tapestries could have come down to us with even a shadow of their former splendor.²⁵ In the West, statuary fell with Rome in the fourth century, but in the East it continued for three centuries, producing innumerable works

²⁴ MÜNTZ, *Bulletin Monumental*, 1886, No. 3, p. 226 *sqq.*, and authorities there mentioned; BAYET, *L'Art Byzantin*, p. 149 *sqq.*; *etc.*

N. B. I do not include in this list some ornamental mosaics executed by Byzantine artists for the Arabs, as in the Mosque of Omar and the Mosque El-Aksa at Jerusalem.

²⁵ The so-called "Hebdomon" remains (*cf.* SALZENBERG, *op. cit.*, p. 124, pls. XXXVII-VIII.). For a description of Byzantine palaces, see LABARTE, *Le Palais impérial de Constantinople*: Paris, 1861: A. G. PASPATE, τὰ Βυζαντινὰ Ἀνάκτορα, καὶ τὰ περί τ' αὐτῶν ἱερόματα: Athens, 1885.

in marble and metal.²⁵ The baths, hippodromes, palaces, circuses, porticos, basilicas, and other public buildings, always gave employment to artists of all kinds,²⁷ especially at Constantinople.

PALACE OF THE PREFECT CONSTANTINE, CONSTANTINOPLE.—A number of these palaces received a rich mosaic decoration. Doubtless this was the case with some of Constantine's buildings, but the earliest instance that I have found recorded belongs to the fifth century. It is spoken of by a Byzantine historian of the time of Justinian, Joannes Lydus.²⁸ He tells us that the Praetorian Prefect, Constantine, built a palace which he called after the name of the reigning emperor, Leo I (457-73). In this palace the judgment-hall was a noble room adorned with a mosaic-picture representing Constantine's installation in office.

This practice of adorning private houses with mosaics must have continued for many centuries, as is proved by the text of the epic poem of Digenis Akritas which dates from the x century. The hero is said to have executed, on the walls of his castle, mosaics which combine sacred and profane subjects in most singular confusion. Subjects from the Iliad, from the history of Alexander the Great, from Greek mythology, from mediæval romances, are combined with gospel-histories.²⁹

BATHS OF ZEUXIPPOS.—Among the mosaics anterior to Justinian may be enumerated those placed in the Baths of Zeuxippos. Cedrenus

²⁵A catalogue of over a thousand works of monumental sculpture, produced between the reigns of Constantine, in the fourth century, and of Constantine the son of Eirene, in the eighth century, might be made merely from the documents published by BANDURI in his *Imperium Orientale sive Antiquitates Constantinopolitanae*, 1711. Such a catalogue would prove, without need of argument, that statuary, though it lost ground in the East after the time of Justinian, did not die out until much later.

²⁷Statistics of the buildings of all sorts built in Constantinople show an enormous artistic activity. They may be easily compiled from DU CANGE, *Constantinopolis Christiana* (Paris, 1682), BANDURI, *Imperium Orientale*, PROCOPIUS, *De aedificiis Justiniani*, and other works, in which over a thousand of such important buildings are mentioned and described.

The well-known writer on Byzantine art, FR. W. UNGER, in his *Quellen der Byzantinischen Kunstgeschichte* (published in EITELBERGER VON EDELBERG's series *Quellen-schriften für Kunstgeschichte des Mittelalters und der Renaissance*) has organized all the material that can be gathered from literary sources for the history of Christian art in the East—almost exclusively at Constantinople. Unfortunately, only the first volume has yet appeared, and does not contain the ecclesiastical buildings. It is, however, invaluable for a reconstruction of the magnificent edifices of Constantinople.

²⁸JOANNES LAURENTIUS LYDUS, *De Magistratibus*, II. 20 (*Corp. Script. Byz.*, ed. Bonn).

²⁹*Annuaire de l'Association pour l'encouragement des Études Grecques*, 1879, p. 140; cf. BAYET, *L'Art Byzantin*, p. 146.

laments their loss (I. 647) by fire at the time of the Nika-revolt under Justinian: "then were burnt the Octogon and the Baths of Severus called of Zeuxippos, by which an entire Museum and collection of works of art in marble, stone, mosaic and bronze . . . were lost." These baths do not appear to have been restored by Justinian to their former splendor.

PALACE OF JUSTINIAN, CONSTANTINOPLE.—The mosaics of the vaults of the portico of Justinian's palace (Chalke) are celebrated. The chronicle of Joannes Malalas, written possibly soon after Justinian's time, says,³⁰ under the XII indiction in Justinian's reign: "In this year the 'Chalke' of the palace of Constantinople, adorned with many marble statues and mosaics, was finished." Prokopios, in his work on Justinian's buildings,³¹ though he never takes the trouble to describe anything in detail (except, of course, Sta. Sophia), makes an exception in favor of these mosaics. According to him, it was a colossal work representing the wars of Justinian: battles; the taking of cities, partly in Italy, partly in Africa—all of which victories were gained under the leadership of Belisarios, who is further represented conducting his army back in safety, and presenting to the Emperor the imprisoned kings and queens and the captured spoils. In the centre of this composition are the Emperor Justinian and the Empress Theodora, receiving, "with joyful countenance," the kings of the Goths and Vandals, the spoils, etc. They are surrounded by the Senate. Prokopios insists on the individual and expressive character of the faces, and we may well believe that here, with living models to portray, the mosaicist must have given more than usual life and individuality to his work. A proof is at hand in the mosaic of one of the small domes of Sta. Sophia, where there is a strong contrast between the typical figures of the apostles, in the scene of Pentecost, and the varied crowd of lookers-on, in which the mosaicist did not follow a traditional and ideal type, but sought to reproduce the features of a Constantinople crowd.³²

TOMB OF THE EMPRESS CONSTANTIA.—Some of the Emperors of this period seem to have had tombs incrustated with mosaics. An instance of this is given in the well-known Byzantine list of imperial tombs,

³⁰ JOANNES MALALAS, *Chronographia*: ed. Bonn, 1831, p. 479: καὶ τῷ αὐτῷ χρόνῳ ἐπληρώθη ἡ χαλκὴ τοῦ παλατίου Κωνσταντινουπόλεως, κοσμηθεῖσα διαφόροις μαρμαροῖς καὶ μουσίῃ.

³¹ PROCOPIUS, *De aedificiis Justiniani*: cf. PROCOPIUS, *Of the buildings of Justinian*: London, 1886 (Palestine Pilgrim's text Society).

³² SALZENBERG, *op. cit.*, pls. XXV, XXXI.

as existing in the monastery τοῦ ἁγίου Μάμαντις. In the narthex of this church there stood an urn decorated with mosaics in which were the remains of Constantia wife of Maurice (582-602) and their children (CODINUS, *Excerpta de Antiq. Constant.*, in *fine*).

PORTRAITS OF CONSTANTINE AND HELENA.—During the first years of the seventh century, the Emperor Phokas (602-10) placed, in the Augusteum, mosaic portraits of the Emperor Constantine and the Empress Helena.³³

ANNEXES TO THE IMPERIAL PALACE AT CONSTANTINOPLE.—Toward the close of the Iconoclastic period, there was a revival in the art of mosaic-painting throughout the East. It commenced under the Emperor Theophilos (829-42), who decorated the annexes to the imperial palace, which he built, with rich mosaic ornamentation, to the exclusion, however, of devotional subjects.³⁴ As Labarte has already, in his *Arts industriels* (t. I, p. 39), given a full description of these mosaics from Byzantine sources, I need only refer to them. The great galleries called *Lausiakos* and *Justinianos* had mosaics (probably ornamental) on a gold ground. North of the principal palace he built a summer palace, called "the Pearl:" the walls of its main hall were covered

³³ BANDURI, *op. cit.*

³⁴ For a description of the entire imperial palace with its various transformations, its uses, and its decoration, consult LABARTE, *Le palais impérial de Constantinople*, who has made use of the very detailed account given by Constantine Porphyrogenetos of the buildings of his ancestor Basil the Macedonian. Cf. LABARTE, *Les Arts industriels*, and especially A. G. PASPATE, *op. cit.*

DIDRON (*Le Palais impérial de Constantinople*, in the *Annales archéologiques*, t. XXI, pp. 261-2) says: *Au X^e siècle, le palais impérial comprenait sept péristyles ou vestibules;—huit cours intérieures;—quatre phiales ou fontaines monumentales;—quatre grandes églises; Saint-Étienne, le Seigneur, Sainte-Marie du Phare et la Nouvelle-Basilique;—neuf grandes chapelles;—neuf oratoires et un baptistère;—quatre salles des gardes;—trois grandes galeries de réception: les tricliniums de Justinien, du Lausiakos et de l'Augustos;—cinq salles du trône: les Lychnos, le grand Consistorion, les Dix-neuf-Lits, le triclinium de la Magnaure et le Chrysotriclinium;—dix tricliniums destinés à l'habitation personnelle des empereurs et renfermant plusieurs salons et chambres à coucher;—trois salles à manger;—une bibliothèque;—un musée d'armes et d'armures;—une salle des trophées;—sept galeries, nommées "diabatica," servant de voies de communication entre les différentes parties du palais;—trois "périptatos" ou allées ayant la même destination;—trois terrasses à ciel ouvert élevées au-dessus d'un étage de rez-de-chaussée;—deux bains.*

En dehors du grand palais, mais dans la même enceinte, on comptait huit palais particuliers ou grands édifices: la Magnaure, le Boucoléon, le Porphyre, le Pentacoubouclon, l'Aétos, le Trésor, le Garde-meuble impérial et le Garde-meuble de la Nouvelle-Basilique; enfin un vaste carrousel et un port sur la Propontide. Cette enceinte du palais impérial couvrait une superficie de près de 400,000 mètres; espace un peu plus grand que celui sur lequel s'étendent le Louvre et les Tuileries, bâtiments, cours, carrousel et jardin compris.

with marble mosaics representing animals of all kinds, probably hunting-scenes: in the hall *Kamilas* was the representation of a banquet, with persons eating fruit. The apartment called *Mesopatos* had the walls of its upper story decorated with trees and other ornaments executed in green marble on a gold ground. The pavement of the *Mousikos* hall was a mosaic reproducing a flowery field with such perfection and harmony as to have given rise to this name.

The *Justinianos* gallery, already mentioned, led to a magnificent hall, the Triclinium of the Nineteen Couches, whose vaults were made over after the designs of the Emperor Constantine Porphyrogenetos, its octagonal panels being decorated, probably with a floral decoration in mosaic on a gold ground.³⁵ At the entrance of the palace proper was a narthex or *Triconcha*, so called on account of its three apses made in imitation of the great apse of Santa Sophia, and whose many-colored marbles indicate with certainty the existence of wall-mosaics. Many of the mosaics in the halls of this imperial palace are difficult to date. For example, we know that Justin II († 578), nephew of Justinian, built the great octagonal Throne-room, the *Chrysotriklinion*, the most sumptuous part of the entire building, erected on the model of the church of SS. Sergios and Bacchos. It had three apses, and was covered by a dome pierced with sixteen windows, under which was a gallery. Both walls and vaults were decorated with mosaics on a gold ground. Their subjects are not known, but Labarte and Didron conjecture that they represented the heroes and history of the Empire. It is even uncertain whether they belong to the reign of Justin II, or to that of Constantine Porphyrogenetos, four hundred years later. To the *Chrysotriklinion* led a gallery called "of the Forty Saints," on whose walls must have been figured, in mosaic, the forty soldier-martyrs of Sebaste. But, one thing is certain, in the main apse of the *Chrysotriklinion*, above the Emperor's throne, was a colossal figure of Christ enthroned, before which the Emperor always prostrated himself before taking his seat. The other great Hall of Reception, the *Magnaaura*, in the form of a basilica with side-aisles, was decorated by Theophilos († 842), and could hardly have been without mosaics.

THE TZYKANISTERION, CONSTANTINOPLE.—In the middle of the ninth century, the emperor Michael III added a vaulted hall with mosaics to the place for public games called the Tzykanisterion or Gymnasion.³⁶

³⁵ LABARTE, *Le Palais impérial*, p. 54.

³⁶ CODINUS, *op. cit.*, pp. 81-82: τὸ δὲ σταῖλον τὸ τρουλλῶν ἐτίσσε. The barbarous

PALACE OF BASIL THE MACEDONIAN AT CONSTANTINOPLE.—This commencement of revival bloomed out under Basil the Macedonian (867–86), the great patron of art. His son Constantine describes in detail³⁷ the important mosaics decorating the halls and galleries of Basil's palace, called *Kenourgion*, added to the south of the Chrysotriklinion: it has also been reproduced by Labarte, who, it may be here remarked, was a strong advocate of Byzantine art, and did much to decrease the odium unjustly attached to it.³⁸ Constantine thus describes the Dining-hall: "The entire hall, from the top of the columns to the vault, is adorned, as is also the eastern dome, with a beautiful mosaic representing the author of the work (the Emperor Basil) enthroned in the midst of the generals who shared the labors of his campaigns, and who are offering to him the cities he has conquered. Just above, on the vault, are reproduced the herculean military exploits of the Emperor; his labors for the happiness of his subjects, his efforts on the field of battle, and the victories granted to him by God."³⁹ From this hall a vestibule, whose walls were covered with elaborate mosaic-compositions, led into the imperial Bed-chamber. This room contained every variety of work in mosaic: the pavement with its peacock and eagles of colored marbles; the lower dado with its fresh decoration of flowers in glass-mosaic; the upper walls with their pictures on a gold ground representing the Emperor, the Empress Eudoxia, and their children, in imperial costume. Constantine Porphyrogenetos himself covered with mosaics the Oratory of St. Paul in the small neighboring palace called *Pentakoubouklon*.

BATHS OF BLACHERNE, CONSTANTINOPLE.—A century later, the emperor Basil Junior (976–1025) demolished the ancient baths of the Blacherne, so well known ever since the days of Constantine, and, in rebuilding them, covered their walls with mosaics.⁴⁰ At this time, mosaic-painting was in high favor, and, judging from the numerous ecclesiastical works of the XI and XII centuries, we may infer that the palaces and other secular buildings were not devoid of this the most favorite form of Byzantine decoration.

word *τζουκαριστήριον* is explained as having the same meaning as *σφαριστήριον*, that is, a place for playing ball.

³⁷ CONSTANTINI IMP., *Historia de vita . . Basilii Imp. (ap. Script. post Theoph.)*: ed. Bonn, p. 321 sqq., § 78.

³⁸ LABARTE, *Les Arts industriels*, I, 54 sqq; *Le Palais impérial*, etc.

³⁹ CONSTANTINI PORPHYROGENETI, *De Basil. Maced., etc.*, I. V.

⁴⁰ BANDURI, *Imp. Or.*, Anon. in lib. II. 40; CODINUS, *Excerpta de antig. Const.*: ed. Bonn, p. 128.

PALACES OF MANUEL KOMNENOS, CONSTANTINOPLE.—Finally, among the last works executed before the fatal capture of Constantinople by the Latins, are the palaces of Manuel Komnenos (1143–80). Both in the ancient imperial palace and in the palace of the Blacherne he caused to be executed, in several halls, mosaic-compositions representing his wars and other acts of his reign.⁴¹ Much interesting material regarding these imperial palaces, their history and decoration, has been given by M. Paspate in his recent publication, *The Byzantine palaces* (*op. cit.*), in which he gives us the results of his own patient investigations among the scanty Byzantine ruins of Constantinople (*cf.* J. T. BENT, *Byzantine Palaces*, in *English Historical Review*, July, 1887).

Thus, we find that, from the beginning to the close of its history, Byzantine art retained a large secular element, very noticeable in the mosaic-paintings.

ECCLESIASTICAL MOSAICS.

To return to a general consideration of the lost mosaics of the East, there are several principal authorities whose writings contain important evidence on this subject. For Palestine, we have several of the *Itineraria* written by travellers to the Holy Land between the IV and the XI centuries, and, later, the precious account of Quaresimus; for Constantinople, the Byzantine texts collected in Banduri, *Imperium Orientale*, and Du Cange, *Constantinopolis Christiana*, and, for the rest of the East, Terzi's *Siria Sacra*, and Pococke's *Description*. Terzi was a Catholic missionary of the XVII century, who travelled extensively throughout the East and whose book (*Siria Sacra*) is not nearly so well known as it should be. Pococke's travels took place in the latter half of the last century, and are a recognized authority. Also, of capital importance for the mosaics of Constantinople is the description of Clavijo,⁴² ambassador of Spain to the Byzantine Court in 1404. He gives us a picture of the churches of Constantinople that had survived the many disastrous fires, especially those of the siege of 1204, and the barbarous pillage by the Latin Crusaders. The main difficulty is to make a critical use of the material afforded by these writers. All are lacking in any knowledge of the subject, and their descriptions are seldom

⁴¹ LABARTE, *Le Palais*, and *Les Arts industriels*, *passim*.

⁴² *Historia del gran Tamorlan. Itinerario y enaracion del viage, y relacion de la embajada, que RUY GONZALES DE CLAVIJO, etc.*: Sevilla, 1582. The part relating to the churches of Constantinople has been translated into French by MÉRIMÉE in his *Études sur les Arts au Moyen Age*: Paris, 1875, pp. 305–37.

precise enough to enable an archæologist to attach to the work an approximate date. Some monuments, though not many, are known to us from early Byzantine writers, such as Joannes Malalas, Photios, Constantine Porphyrogenetos, Niketas, Joannes Lydus.

Though it is hardly possible to form a positive opinion in view of the desultory evidence we possess, it seems probable that mosaic-painting was even more generally used in the East than in the West, though we know so much less about its monuments, as, in its origin and by its character, it was eminently a Byzantine art. For this lack of information there are three reasons. We possess, for the East, no such documents as the *Liber Pontificalis* of Roma, and that of Ravenna. The destruction of monuments in the East by earthquake, fire and conquest has been so great as to leave but scanty remains from the early Middle Ages: over a hundred and fifty earthquakes are registered for the city of Constantinople alone before the Turkish conquest, and the destructive nature of the terrible fires is attested by many graphic contemporary accounts. Finally, in addition to all this, we must take into account the sweeping results of the Mohammedan conquest, which early cut off whole provinces and stopped their artistic growth, which converted nearly every church into a mosque, and destroyed or covered with plaster their figured decoration, as contrary to the rules of Mohammedan worship. The Western churches themselves, where built under Byzantine influence, like San Vitale at Ravenna, San Marco at Venezia, and the churches of Sicily, are proofs of the greater preponderance of this branch of painting; for, while, after the fifth century, the mosaics in Western churches were confined to the façade and apse, in the East they spread also over domes and walls.⁴³ Their use in secular buildings, so common in the Byzantine Empire, was unknown in Europe—the only instance that occurs to me, the palace of Theodoric at Ravenna, being clearly an imitation. Even in details, the greater use of mosaics in the Orient is visible. In Tunisia, for instance, the ruins of churches of the fifth and sixth centuries show that such objects as baptismal fonts and tomb-slabs were quite generally ornamented with a mosaic incrustation.

Byzantine mosaics may be classified under four periods. The first begins with Constantine, and is almost identical in character over the whole empire. In the second period, beginning under Justinian in

⁴³ There are now more Byzantine mosaics in the West than in the East: but my remarks cannot extend to these well-known works.

the sixth century, mosaic-painting in the East, leaving the Roman type, assumes a more distinctly Greek character, and is refined and even more classic than before. After a slight decadence, a third period begins, in the ninth century, with Basil the Macedonian, under whom art again takes up classic traditions in a more modified form, though we see a beginning of the severe and ascetic style which afterward becomes prevalent. The fourth period, under the Komnenoi of the twelfth century is one of decadence: the grace and classic character of former times is lost, art becomes fossilized, the figures are elongated, and become stiff and severe. This classification into periods is convenient, but somewhat arbitrary: a purely Greek style appears even before Justinian, and the decadence begins before the Komnenoi and may be discovered in mosaics of the beginning of the eleventh century that show no traces of the revival under Basil. A rigorous classification will not be possible until Eastern mosaics are better known to us from photographs and drawings, or from personal examination.

* The churches built in the East by Constantine the Great probably contained mosaics, as did his churches in the West. This seems to be proved for the following churches: Ch. of the Apostles and Ch. of St. Stephen, Constantinople; Bas. of the Nativity, Bethlehem; Ch. of Holy Sepulchre, Jerusalem: while for other buildings, like the octagonal *Basilica Aurea* at Antioch, and the Basilica of Paulinus at Tyre, there are no proofs, but a balance of probability.

CH. OF THE APOSTLES, CONSTANTINOPLE.—Eusebios, in his description of the Constantinian Church of the Apostles (*Eccles. Hist.*, lib. ix. ch. 58), thus speaks of the wall-mosaics: "he revetted it magnificently with different stones, from the ground to the ceiling." He destined this church for the imperial mausoleum, and would naturally have lavished on it all the resources of art.

CH. OF ST. STEPHEN, CONSTANTINOPLE.—It was also a tradition among Byzantine antiquaries, that the church of St. Stephen near Sigma, built by this Emperor, was adorned with mosaics which, together with the columns, were removed and used by Leo I (457-74) in the construction of the church of All Saints.⁴⁴

⁴⁴ GEORGIU CODINI, *Excerpta de Antiquitatibus Constantinopolitanis*: Bonn, 1843, p. 126: τὸν ἅγιον Στέφανον τὸν πλησίον τοῦ Σίγματος ὁ μέγας Κωνσταντῖνος ἐκτίσεν, ὁ δὲ βασιλεὺς Λέων ὁ φιλόσοφος ἐσμίκευε τοῦτον, καὶ τὴν ἑλὴν πᾶσαν, τὰ τε μάρμαρα καὶ κίονας καὶ τὰς χρυσᾶς ψηφίδας, ἀπέθετο εἰς τοὺς ἁγίους πάντας, ὅπου κεῖται τὰ λείψανα τοῦ ἁγίου Ἰσραήλ. This is contradicted by BANDURI (p. 484), in his commentary on

BASILICA OF THE NATIVITY, BETHLEHEM.—At Bethlehem the Empress Helena built the Basilica of the Nativity, which still remains, one of the most precious examples of early Christian architecture. It retains a number of mosaics, but these are mediæval, and probably replaced the early Constantinian mosaics. The existence of these earlier mosaics is made almost certain by the following ancient tradition : when Chosroes, King of Persia (591–628) conquered Palestine, his troops spared this church because, in gazing at the mosaic-composition on the façade representing the Adoration of the Magi, they recognized their own national costume in that of the Wise Men from the East.⁴⁵

CH. OF HOLY SEPULCHRE, JERUSALEM.—The wording of Eusebios' description (*Life of Constantine*, § 30–40) does not make it certain whether the marbles of different colors that covered the walls were slabs cut in geometric forms alone, or whether the upper section was decorated with figured mosaics.

BASILICAS OF ANTIOCH.—Later in the century, we hear of a group of four basilicas erected in the forum of Antioch by the Emperor Valens (364–79), and which, the historian Malalas (lib. XIV) tells us, were decorated with mosaics and many-colored marbles. The same writer says that the prefect Anatolios, in building the basilica in Antioch called by his name and surnamed "the luminous" (διάφωτος), placed in it the inscription in mosaic Ἔργον Θεοδοσίου Βασιλέως, and above it the figures of the two emperors, Theodosios II and Valentinian III.

CH. OF ST. JOHN, CONSTANTINOPLE.—The church of St. John in *Ebdomo* is known to have been built by Theodosios, but there is nothing to show that the mosaics which Clavijo (*opus cit.* p. 307) admired there in 1404 belonged to this early period. Still, though they may be a later addition, it is as well to mention them here. The building itself is in the early style, with porch and atrium : above the entrance to the porch was a figure of Saint John, while its vaults and walls were covered with mosaics. The circular or octagonal church itself had both dome and walls covered, the central figure in the cupola being that of Christ.

CH. OF THE VIRGIN AD BLACHERNAS, CONSTANTINOPLE.—In the middle of the fifth century, the church of the Virgin in the Blachernian quarter was erected by Marcianus and Pulcheria, in honor of a mira-

Book I of the *Antiquitates Constantin.*, who says that the Church of All the Saints near the Ch. of the Apostles existed before the time of Leo I.

⁴⁵ BAYET, *Recherches pour servir, etc.*

cle-working image of the Virgin.⁴⁶ Its mosaics are described by the Byzantine author of the life of S. Stephen the Younger (MONTFAUCON, *Anal. gr.*: Paris, 1688, pp. 453-4). After speaking of the paintings, representing the entire life of Christ, which covered the upper part of the side walls, the author adds a description of the dado of mosaics placed below them: . . . καὶ ὄρνεοσκοπεῖον τῆς ἐκκλησίας ἐποίησεν δένδρα καὶ ὄρνεα παντοῖα θηρίατε καὶ ἄλλα τινα ἐγκύκλια διὰ κισσοφύλλων γεράνων τε καὶ κορωνῶν καὶ ταῶνων ταύτην περιμουσώσας ἔδειξεν.⁴⁷ This landscape of trees and plants, in which animals and birds, like cranes, crows, and peacocks are running in the fields, or flying among the foliage, reminds one of similar scenes spoken of in writers of the fourth and fifth centuries as executed in mosaic or fresco: however unsuitable for a church they may seem to us, they did not then appear out of place. In another place (I, 588), Garrucci remarks of Constantine Kopronymos (741-75): *La basilica delle Blacherne ornata da S. Pulcheria di mosaici esprimenti la vita di Cristo, fu imbrattata di calce e coperta d'intonico, sul quale fece egli dipingere piante, fiori ed uccelli*. There seems to be a confusion, here, between the frescos of the life of Christ and the mosaics below, for the Greek text clearly speaks of frescos. This discrepancy can be reconciled, I believe, by granting the church to have been rebuilt and decorated with mosaics by Justinian.⁴⁸ Prokopios describes the Church of the Virgin *ad Blachernas* as one of the most interesting erected by Justinian, before the death of Justin; and John of Damascus, when he says that Constantine Kopronymos destroyed its mosaics, which represented New-Testament scenes, doubtless referred to mosaics executed at the time of Justinian's restoration, for Prokopios' assertion, that he actually built the church, instead of restoring it, must be taken *cum grano*.⁴⁹ The church suffered severely from fire in 1070, and its restoration lasted seven years. Clavijo describes it only a few years before its final destruction in 1434 (MÉRIMÉE, *op. cit.*, p. 330).

⁴⁶ CODINUS, *op. cit.*, p. 95: τὸν ναὸν τὸν μέγαν τῶν Βλαχερνῶν Μαρκαρίου καὶ Πουλχερίας ἀνήγειραν, κοσμήσαντες αὐτὸν διὰ πολυτελῶν μαρμάρων καὶ ποικίλων.

⁴⁷ GARRUCCI, *Storia dell' arte cristiana*, I, pp. 508-9; Anon. *apud* BANDURI, *op. cit.*

⁴⁸ DU CANGE in his *Constantinopolis Christiana*, I. IV, pp. 55-6, remarks: *Aedem vero Deiparae Blachernianum a Pulcheria Augusta primum aedificatam scribunt passim scriptores Byzantini. Hanc postmodum de novo instauravit Justinus Senior. Denique solo tenuis incensum fuisse sub Romano Diogene, restauratum postmodum, novis ornamentis et nova aedificiorum accessione auxit mire Andronicus Senior.*

⁴⁹ HÜBSCH, *Monuments de l'architecture chrétienne*: Paris, 1866, p. 75.

CH. OF ST. POLYEUKTES, CONSTANTINOPLE.—A little later, the church of St. Polyeuktes was built by Juliana Anicia,⁵⁰ daughter of the ephemeral emperor Olybrius (472): it was built in four years by architects sent from Rome, and contained a mosaic, the inscription of which is preserved in the *Anthology*.⁵¹ This inscription shows the subject to have been the unusual one of the conversion and baptism of Constantine, portrayed, probably, according to that legendary belief prevalent in the Middle Ages which maintained that Pope Sylvester cured Constantine of leprosy by converting and baptizing him in Rome.⁵²

Mosaic-painting was greatly developed in the sixth century under Justinian and his immediate successors, and was employed to decorate a host of basilicas and palaces in the capital and other large cities of the empire. Some of these works have remained, as in Santa Sophia at Constantinople, Sta. Sophia at Salonica, and the church of the Transfiguration on Mt. Sinai. In the great Santa Sophia it is not perfectly easy to distinguish what belongs to the time of Justinian, what to the reign of Basil the Macedonian; and, so long as the church continues to be a mosque, we cannot be certain how much remains of the work of the sixth century. Many of the mosaics of this period were destroyed by the Iconoclasts, especially by Constantine Kopronymos. Paulus Silentiarius speaks of the mosaics of Sta. Sophia; but Prokopios, although in speaking of other buildings he uses terms that indicate the existence of mosaics, is unfortunately too sparing of details to be more precise.

GAZA, BASILICAS.—The universal use of mosaics is certified, for instance, by such texts as the sermon preached at Gaza, under Justinian, by Coricius, in which he describes two basilicas built there by Marcian, bishop of Gaza.⁵³ The first, dedicated to St. Sergios, had its vaults, arches and apses covered with mosaics on a gold ground. The subject of the mosaic of the central apse was the Virgin and Child surrounded by a choir of saints. The second basilica, dedicated

⁵⁰ Another account asserts this church to have been erected by Juliana, daughter of Valentinianus and sister-in-law of Theodosios: anon. ap. BANDURI; CODINUS, p. 91.

⁵¹ Ed. Jacobs, t. I, p. 8: "Ἐστ' Ἰουὰ καὶ γραφίδων ἱερῶν ὑπὲρ ἄντργας ἀλλῆς | ἔστιν ἰδεῖν μέγα θαῦμα, πολύφρονα Κωνσταντῖνον | πῶς προφυγῶν εἰδῶλα, θεημάτων ἔσβεσε λύσσην | καὶ Τριάδος φάος εἶπεν ἐν ὕδασι γυνὴ καθήρατ."

⁵² FROTHINGHAM, *L'Omelia di Giacomo di Sarug sul battesimo di Costantino imperatore*: Roma, 1883 (*Accad. dei Lincei*).

⁵³ *Coricii Gazaei orationes*: ed. Boissonade, Paris, 1845: *Oratio in Marcianum*. Cf. HÜBSCH, *op. cit.*, pp. 80-1.

to St. Stephen, had a similar decoration. Coricius mentions figures of St. Stephen and John the Baptist as being on the right and left of the apse. The side-aisles were vaulted and ornamented with mosaics, which seem to have had figured scenes above, on the second story, and a water-scene below, which the author describes as follows: "I was about to forget the Nile. It is not the representation of a river as painters usually execute it [*i. e.*, as a human figure]. The river is here shown with its waves in motion, and with all its details, and the green banks. All kinds of birds are to be seen; some swimming or bathing in the water, others hopping on the sward."

CH. OF ST. MICHAEL.—Procopius seems to indicate the existence of mosaics (p. 30 of Engl. transl.) in the Church of St. Michael in *Anaplo*, when he says that "a great quantity of gold is everywhere spread over the church;" though we must avoid confusing with mosaics the gilt coffered ceilings, which, however, were not used by Justinian.

BASILICAS OF DAMASCUS.—Damascus and Antioch were, after the capital, the greatest cities of the Empire. The basilicas of Damascus were built on a scale of great magnificence. The Emperor Heraklios (610–40) dedicated to St. Zacharias an immense basilica whose interior was supported by sixty columns and still has an ornamental-mosaic decoration of blue cubes on a gold ground. The figured mosaics were doubtless destroyed or covered up by the Mussulmans when they converted the church into a mosque. To a still earlier date seem to have belonged the mosaics of the former basilica of John the Baptist, now the great mosque: a few still remain. De Vogüé, in his *Voyage au Mont Athos*, writes that he remarked some very ancient and well-preserved mosaics both on the wall of the mosque itself and in the former baptistery, placed in the atrium (*cf.* KER PORTER, *Damascus*, p. 24). Those in the mosque of Malek Daher, seen by both De Vogüé and Ker Porter, may not be Christian but Arabian.

MOSAICS OF PHOKAS.—A number of mosaics were executed in Constantinople under the reign of Phokas (602–10). He erected to his patron-saint a church which he left unfinished: it was vaulted and adorned with mosaics by Heraklios who dedicated it to St. John the Evangelist.²⁴ Phokas also built a baptistery in which he placed some mosaics.

The fact of a general attempt by the Iconoclasts (fortunately incomplete) to destroy the mosaics of the churches throughout the empire is quite certain. Reference is made to some such plan being attempted

²⁴. *Anon. apud BANDURI, op. cit.*

in 768, under Constantine Kopronymos, by the Patriarch Niketas. This is reported by the Patriarch Nikephoros in his *De Rebus post Mauricium gestis*.⁵⁵

MOSAICS AMONG THE ARABS.—The Arab Khalifs, in the construction of their palaces and mosques, felt the need of so suitable an architectural ornament as mosaic, and repeatedly sent to Constantinople requests for mosaicists. Thus, when a mosque at Damascus was built (705–17), the mosaic ornamentation was executed by Greek mosaicists, and others were sent, at the request of the Khalif Abdurrahman, to assist in the ornamentation of the mosque of Cordova.

CHALKE, CONSTANTINOPLE.—One of the worst Iconoclastic acts of Leo the Isaurian was his profanation and destruction of the bronze figure of Christ placed in the *Chalke* of the imperial palace by the Emperor Constantine. Pope Gregory heard of it, though inaccurately, and wrote reprovingly. In order to repair this outrage, the Empress Eirene (797–801) placed in the same position a mosaic image of Christ (BANDURI, *op. cit.*; CODINUS, *op. cit.*, p. 77).

MOSAICS OF BASIL THE MACEDONIAN.—Under the emperor Basil the Macedonian (867–86), as noticed, a renaissance of the art of mosaic took place, assisted by the necessity to restore the mosaics in all the churches where they had been destroyed by the Iconoclasts. The most important work of the kind executed under his reign was, without doubt, the mosaic decoration of the *New Church of the Virgin*. The mosaics entirely filled its five cupolas and a portion of the walls. The Patriarch Photios, who lived at that time, has left us a detailed description of these mosaics (*ap.* BANDURI), which has been quoted by Labarte (*Le Palais impérial*, *loc. cit.*): “The vault of the church, composed of five domes, is as brilliant as the starry heaven, with gold and figures. In the principal dome is the figure of Christ: . . in the circular compartments (drum) are seen a crowd of angels grouped around their Master. In the apse . . is the figure of the Virgin (as an *Orante*) . . A choir of apostles, martyrs, prophets and patriarchs fill and embellish the entire church.” Two chapels were attached to the church, that dedicated to Elias Thesbites having a mosaic in its vault. Two galleries, like cloisters, joined the church to other buildings, and their vaults had

⁵⁵ After speaking of his restoration of certain buildings, he goes on to say that he destroyed, in all the chapels used as stations in religious processions, all the images of Christ and the Saints in mosaic or encaustic painting (διὰ ψηφίδων χρυσῶν καὶ κηροχύτου ὕλης εἰκονογραφίας ἀπέξυσε).

mosaics representing the sufferings and combats of the martyrs. Other mosaics were placed by Basil in *Santa Sophia*. To his reign may be attributed the extensive mosaics seen in the *Church of the Virgin* ἐν πηγῇ by Clavijo (*op. cit.*) and described by him somewhat in detail. The church was built by Justinian,⁵⁶ made over by Eirene and Constantine, and embellished by Basil. The church is spoken of by Clavijo as circular with centre and aisles all covered by a cupola filled with mosaics. Among other mosaics in the cloister was a tree of Jesse: in the refectory the vault and walls are covered with subjects representing all the incidents in the life of Christ.⁵⁷

CH. OF ST. JOHN, CONSTANTINOPLE.—Another church described by Clavijo is that of St. John, though which of the many dedicated to John the Baptist and John the Evangelist cannot be made out. The building itself seems ancient, as it retains the atrium. The circular church must have had considerable size, as it had three aisles around the central part, and galleries above these aisles. The cupola and walls of the church, and the vaults and walls of the galleries, were all covered with mosaics, as were the walls of a chapel. A singular circumstance, and one which would lead one to fix on rather a late date, is that, in a mosaic of the Last Supper in the refectory, Christ was represented seated at table with his disciples, instead of reclining.⁵⁸

⁵⁶ Consult, for the history of the church, GARRUCCI, *op. cit.* 1, 541.

⁵⁷ The following is the passage in CLAVIJO, in Mérimée's translation (*op. cit.* pp. 310-15): . . . le corps de l'église, du côté du dehors, est tout imagé d'images et de figures de toutes façons, riches et faiticement travaillées d'or, azur et autres couleurs. . . . Ladite salle (ronde) est bordée tout autour de trois nefs qui s'y joignent, et le ciel couvre tout ensemble, salle et nefs, et est ouvré fort richement de mosaïque. . . . Et hors de l'église il y avait un cloître d'œuvre très-belle avec beaucoup de belles histoires. Et y avait-on figuré la verge de Jessé. . . c'était œuvre de mosaïque tant merveilleusement riche et artistement travaillée, que celui qui l'a vue n'en a pas vu d'autre si merveilleuse. . . . Un réfectoire, très-large et haut. . . . le ciel était tout d'œuvre de mosaïque, et sur les parois on voyait historiés en œuvre de mosaïque de beaux traits de l'histoire sainte depuis que l'ange saint Gabriel salua la Vierge sainte Marie, jusqu'à la naissance de Jésus-Christ, Notre-Seigneur, puis comme il alla par le monde avec ses disciples, et toute la suite de sa bienheureuse vie, jusqu'à ce qu'il fût crucifié.

⁵⁸ CLAVIJO, *op. cit.*, pp. 315-16: une autre église qui s'appelle Saint-Jean; c'est un monastère. . . . Au corps de l'église, lequel est comme une salle ronde sans coins, très-haute, et est bordée de trois grandes nefs qui sont couvertes d'un ciel, les nefs et la salle. . . et le ciel de la salle et des nefs, ensemble les parois, sont d'œuvre de mosaïque trop richement travaillée à tout beaucoup d'histoires. . . . lesdites nefs ont une galerie élevée. . . Et le ciel et les parois sont d'œuvre de mosaïque. . . et hors du corps de l'église, il y avait une chapelle merveilleusement belle et ornée à tout œuvre de mosaïque, où se voyait très-richement pourtraitée l'image de sainte Marie, et bien semblait que ce fût en son honneur et révérence que fût bâtie la chapelle susdite. . . Et sur les parois du réfectoire virent historié en mosaïque le mystère du jeudi de la Cène, comme Notre-Seigneur Jésus-Christ était assis à table avec ses disciples.

CHURCH OF THE VIRGIN OF DESSETRIA.—The same writer also mentions (p. 333) the existence of mosaics in the Church of the Virgin called "of Dessetria."

A great part of the Byzantine mosaics of the X and XI centuries have been preserved, and literary notices of those that have been destroyed become much more infrequent.

CH. OF ST. GEORGE IN MANGANA.—In the middle of the XI century, the emperor Constantine Monomachos (1042–53) erected the church of S. George in Mangana, described by Clavijo (MÉRIMÉE, pp. 328–29; and BANDURI, *op. cit.*), which he decorated with mosaic-paintings, including a large figure of Christ, probably in the apse, and a representation of the Ascension, and one of the Étimagia or Pentecost.⁵⁹

CHURCHES OF PALESTINE.—During the Crusades, many of the churches of Palestine received mosaics executed by Byzantine artists. Some of these remain (see previous list), while others have gone to ruin, as, for example, those of the *Ch. of S. Anna at Jerusalem*, which, when Terzi (I. II) saw it, was full of mosaics. It may be well to speak, here, of one or two more mosaics mentioned by Terzi. At *Samaria*, in the *Ch. of John the Baptist*, the small cupola (*baldacchino*) over the altar had a mosaic on a gold ground. At *Arimathea*, the *Ch. of John the Baptist* is reported by him to have three naves, adorned with porticos having friezes and arabesques in ancient mosaic.

Although the Crusaders used a thoroughly French style of transitional architecture, in the churches which they built in Palestine during the twelfth century, they were strongly influenced by Oriental art, both Byzantine and Saracenic. This is especially shown in their lavish use of mosaic-painting, for which they employed Byzantine artists exclusively: the Greek mosaicist Ephrem signed his name to one of the mosaics executed by him in the *Basilica of the Nativity at Bethlehem*, and the fact is equally evident in those of the *Church of the Holy Sepulchre*, for the style is purely Byzantine though the greater part of the

⁵⁹ CLAVIJO, *op. cit.*, p. 328–29: *Et le même jour lesdits ambassadeurs allèrent voir une autre église qui a nom Saint-George . . le corps de l'église est très-élevé et tout couvert de mosaïque, et l'on y voit la représentation de Notre-Seigneur Jésus-Christ quand il monta au ciel. Le pavé de ladite église est aussi merveilleusement travaillé, étant couvert de dalles de porphyre et de jaspe de plusieurs couleurs; et y voit-on force entrelacs très-déliés, comme aussi sur les parois. Et au milieu du ciel de ladite église on voit figuré Dieu le Père, en face de l'entrée, en œuvre de mosaïque. Ensemble est figurée la vraie croix, que montre un ange, entre les nuages du ciel, aux apôtres, ce pendant que descend sur eux le Saint-Esprit en figure de feu, et le tout en œuvre de mosaïque merveilleusement travaillée.*

inscriptions that accompany and explain them are in Latin. In both of these churches there was a complete cycle of mosaic-paintings, of which only a few remnants have survived. There were certainly mosaics already existing in some of the churches of Palestine on the arrival of the Crusaders, though most had been destroyed by the Persians and Mohammedans. Those of the *Monastery of the Holy Cross* still exist. Another, in the apse of the *Church of the Ascension* on the *Mt. of Olives*, is described by John of Wirtzburg.⁶⁰ Speaking of the day of Pentecost, he says: *quod adhuc in eodem loco pictura extante de musivo opere in sanctuario, abside ejusdem ecclesiae, demonstratur; nam ibi duodenarius apostolorum numerus cum ipsorum imaginibus, spiritu sancto in forma ignearum linguarum ad capita singulorum discendente, per similitudinem picturae continetur, cum tali epigrammate: Factus est repente de coelo sonus advenientis, etc.* The date of John of Wirtzburg's visit is 1165: the church which the Crusaders built there was destroyed in 1187. De Vogüé speaks of the *rotonda* of the early church as built by Modestus (c. 604). It was destroyed before the twelfth century, but, as De Vogüé remarks, the apse was saved, and the mosaic may have remained from the early church, though the Latin inscription would indicate an origin posterior to the Conquest.

MOSQUE OF OMAR, JERUSALEM.—The Mosque of Omar, converted into a church by the Crusaders, was decorated on the inside and outside with mosaics which have gradually perished, those on the outer walls being replaced by enamelled tiles. John of Wirtzburg says: ⁶¹ *Idem vero Templum Domini, miro tabulatu marmoreo intus et exterius a quocunque exstructum, formam habet rotundam decentem, immo circulariter octogonam . . . habens parietem de optimo musivo opere exterius adornatum usque ad medietatem ejus; nam reliqua pars est de marmoreis lapidibus.* He carefully transcribes the inscriptions that accompanied the mosaic-pictures of the interior, from which we learn some of the subjects: the Presentation of the Virgin; Christ expelling the money-changers from the Temple; Christ offered up on a stone, like Isaac; Jacob's ladder; Christ and the woman taken in adultery; the annunciation to Zacharias; several figures of Christ, over the doors.

CHURCH OF THE HOLY SEPULCHRE, JERUSALEM.—It is well known that, when the Crusaders rebuilt the Church of the Holy Sepulchre, with its circular body to which was added a long choir-nave, they covered the

⁶⁰ TOBLER, *Descriptiones Terrae Sanctae ex Saeculo VIII, IX, XII et XV*: 1874, p. 157.

⁶¹ *Op. cit.*: cf. Vogüé, *Les Églises, etc.*, p. 283; TOBLER, *Deser. Terrae Sanctae*, pp. 119-24.

walls and vaults with mosaics. A description is given both in John of Wirtzburg and in Quaresimus,⁶² with whose assistance we can form some idea of their extent. They represented the testimony of the prophets regarding Christ, *i. e.*, the events in the Old Testament that prefigured Him, and also Christ's life on earth, especially His passion, burial, and resurrection. John of Wirtzburg thus describes the Descent into Hades, placed over the high altar, in the new part of the church: *pictura in opere musivo. Continetur enim in ea imago Christi, seris confractis inferni, resurgentis, antiquum patrem nostrum Adam inde extrahentis.*

BASILICA OF THE NATIVITY, BETHLEHEM.—The mosaics of this church were preserved better than all others, up to quite a late date. They were described by John Phokas at the close of the twelfth century: in the seventeenth, Quaresimus saw them, in part destroyed, and describes them very fully (II, p. 645): Ciampini copied him at the close of the century and published a drawing of a part of the mosaic of one of the walls of the central nave, sent to him from Jerusalem (*cf.* DE VOGÜÉ, p. 66 *sqq.*). It is hardly necessary here to mention them with any degree of fullness. The entire New Testament was represented. But most unusual and interesting was a series of pictures on the main wall representing the various Œcumenical Councils of the Church, from the beginning, each with its attendant angel. The arrangement was as follows. The inner wall of the facade was covered with a representation of the Tree of Jesse. The eleven bays of the nave had mosaics arranged as follows: (1) a row of half-figures representing the genealogy of Christ; (2) a series of subjects with double arcades or domed porticos with an altar, above which was a long inscription containing a *résumé* of the decrees of each Council; (3) a frieze of leaf-and-scroll work; (4) a row of angels; (5) a second frieze like the first. The scenes from the New Testament were placed in the three apses, the transepts, and on the walls of the choir, as well as in the crypt. The well-known inscription says that Ephrem, painter and mosaicist, finished the work in the reign of Manuel Komnenos (†1180).

The last we hear concerning mosaics in the East is the order of the emperor Isaac Angelos (1185–95) to repair the injured mosaics throughout the whole Empire; and, finally, the repairs and additions made to the mosaics of Santa Sophia by John Palaiologos in the middle of the fourteenth century.

⁶² QUARESIMUS, *op. cit.*, II, p. 368 *sqq.*; JOHN OF WIRTZBURG, *op. cit.*, *ap.* TOBLER, p. 147 *sqq.*; VOGÜÉ, *Les Églises, etc.*, p. 188 *sqq.*

PORTABLE MOSAICS.—In the list of extant late-Byzantine mosaics, I enumerated a number of small portable mosaic-tablets still existing in public and private collections, in churches, *etc.* The examples, use and character of this interesting branch of the art are discussed in detail by M. Eugène Müntz in his able paper, *Les Mosaïques Byzantines portatives* (*Bulletin Monumental*, 1886, No. 3, p. 226 *sqq.*): and, in *Les Collections des Medicis au XV^e siècle*, 1888, he publishes the inventories of Piero di Cosmo de' Medici (1465) and Lorenzo de' Medici (1492), in which were enumerated, respectively, six and nine of these Greek mosaic-tablets, the subjects of which are mentioned. A number of other inventories of the XV, XVI and XVII centuries contain descriptions of many such tablets, which were evidently great favorites with collectors, after the conquest of Constantinople in 1204 made them known to Europe.

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INSCRIPTIONS FOUND UPON THE AKROPOLIS.

INSCRIPTION I.*

COLUMN 1.

- ἀπ]οφυγ
 Ὀλυμπ
 <φ>φιά(λη) στα(θμὸν) Η·
 ταλα(σιουργός), ἐν Κυδ(αθηναίφ)
 5 οἰκοῦ(σα)], ἀποφυγοῦσα
 Λυσίδικον Λυσιστρ-
 άτου Ἀχαρνέα φιά(λη) στα
 · ΙΤτος ἐμ Πει(ραιεῖ) οἰκῶν,
 Χᾶλκεύς, ἀποφυγὼν
 10 Διονύσιον Ἴσοτέχν(ου)
 φιάλη σταθμὸν Η·
 ... σιθεαν ἐμ Πει(ραιεῖ) οἰ-
 κο(ῦσα)], ταλα(σιουργός), ἀποφυγοῦσα
 Διονύσιον Ἴσοτέχν(ου)
 15 φιάλη σταθμὸν Η·
 Σάτυρος Ἀγνοῦν(τι) οἰκῶν,
 γεωργός), ἀποφυγὼν
 Κηφίσιον Κηφισοδή-
 μου Παλλη(νέα) φιά(λη) σταθ(μὸν) Η·
 20 .. ΩΙΑΝ, καπηλ(ός), ἐμ Πε(ιραιεῖ)
 οἰκῶν, ἀποφυγὼν
 Π]ολυεύκτο(υ)

COLUMN 2.

- οκίε.
 ωπεκῆ(θεν) φιά[λ(η) στ]αθμ[δ(ν) Η·
 ΑΛΝΗΣαμφος ἐν Κο[λλ(υτῶ
 οἰκῶν, ἀποφυγὼν
 5 Οἰνιάδην Οἰνοκλέο(υ)
 Ἀμαξαν(τέα) φιάλ(η) σταθμ(ὸν) Η·

* Dots placed under the letters denote that they are not certain.

- Φιλίστη, ταλασι(ουργός), ἐμ Μ-
 ελ(ίτη) οἰκοῦ(σα), ἀποφυγοῦσ(α)
 Ἐπιχαρίδην Λυσίππ-
 10 ου Λαμπτ(ρέα) φιά(λη) σταθμ(όν) Η·
 Ἀριστομένης ἐμ Μελ(ίτη)
 οἰκ(ῶν), σκυτοτό(μος) ἀποφυγ(ῶν)
 Θρασυμήδη Κηδεῖάο(υ)
 Λευκονο(έα) φιά(λη) σταθμ(όν) Η·
 15 Ὀνησίμη, σησαμοπώλ(ης),
 Ἀλωπ(εκῆ) οἰκοῦ(σα), ἀπ[οφυγο(ῦσα)
 ΦΙ·Ν·Κ [ἐν Ἀλ-
 ωπε(κῆ) οἰκο[ῦντα
 Ποσειδῶ[ν [ἐ-
 20 ν Κολλυ[τῶ
 ΥΓΙΑΙ
 ΧΟΑ·
 Ξ
 ΑΡΧ
 25 ΟΥ

COLUMN 3.

- ΑΥΩΝ Ἀλωπε[κῆ οἰκο(ῦσα),
 ταλασι(ουργός), ἀπο[φυγοῦσ(α)
 Θεόφιλον Ἀν[.....
 Εὐωνυμέ(α) φι[ά(λη) σταθμ(όν) Η·
 5 Μένιος ἐν[... οἰκῶν,
 διάκονο[ς? ἀποφυγῶν
 Διογ[γ].....
 ΠΟΕ
 ΚΑ
 10 ΟΦ

INSCRIPTION II.

COLUMN I.

- ος Παλ-
 λην(έα) φιάλη σταθ[μ]όν Η·
 ἐν] Ἀλ[λ] ωπ(εκῆ) οἰκ(οῦσα),
 ἀποφυγοῦσ[α Δωρόθεον
 5 μ]άχου Ἀναφλ(υστέα)
 φιάλ]η σταθμ(όν) Η·

- Ἀρι]στιππίδης ἐν Μ(ελίτη) οἰκ(ῶν),
 ἀπο]φυγῶν
 Νε]οπτόλεμον Μελ(ιτέα)
 10 φιά]λη σταθμὸν Η·
 Σωσ]τράτη ἐν Μελ(ίτη) οἰκ(οῦσα),
 ἀποφ]υγοῦσα
 Νεοπ]τόλεμον Μελ(ιτέα)
 φιάλ(η) σ]ταθμὸν Η·

COLUMN 2.

- τροζ
 φιάλη στ[αθμὸν Η·
 Νικίππος ἐ[ν οἰκ(ῶν),
 ἀποφυγῶν Ἐν[. Ἀ-
 5 σκιοῖκου ἐκ Κ[ολλυτοῦ
 φιάλη σταθμ[ὸν Η·
 Ἀριστόμαχος [ἐν Μελ(ίτη) οἰκ(ῶν),
 ἀποφυγῶν Ὀλύ[μπιχον
 Κεφισ(ιέα) φιάλη στ[αθμὸν Η·
 10 Ἀγαθοκλῆς [ἐν οἰκ(ῶν),
 ἀποφυγῶν
 τευ

INSCRIPTION III.

COLUMN I.

-]σθενίδην Αἰγι-
 λι]έα φιάλη σταθμὸν Η·
 Μ]ανία ἐν Κολλυτῷ οἰκοῦ-
 σα ἀποφυγοῦσα
 5 Κηρυκίδην Θηβαίων
 καὶ Ἀριστοκλέα ἐν Κυδα-
 θηναίων οἰκοῦντα
 φιάλη σταθμὸν Η·
 Ἑρμαῖος ἐμ Πειραεῖ οἰ-
 10 κῶν, ἀποφυγῶν
 Εὐθίππον Λαμπτρέα
 φιάλη σταθμὸν Η·
 . . .]ος ἐμ Πε(ι)ραεῖ οἰκῶν,
 ἀποφυγῶν] Εὐθίππον
 15 Λαμπτρέα φι]άλη στα(θμὸν) Η·

COLUMN 2.

- [ἐν Παιο-]
- νι[δ]ῶν οἰκοῦ[ντα καὶ κοι-
νὸν ἐρανιστῶν
φιάλη σταθμὸ[ν] Η΄
- 5 Σωκλῆς ἐμ Μελί[τει οἰ-
κῶν, ἀποφυγῶν].
κράτην Πει[ραία] φιάλη
σταθμὸν Η΄
- Τιμὼ ἐμ Μελίτει οἰκοῦσα,
10 ἀποφυγοῦσα Μνησίστρα-
τον Ἀλαέα φιάλη στα(θμὸν) Η΄
Δόκιμος ἐμ Μελίτει οἰκῶν,
ἀποφυγῶν Πειθέρον
- Ἀλ(ω)πεκῆθεν, Λυσίστρα-
15 τον Ἀλωπεκῆθεν,
Θουδόσιον Ἀλωπεκῆθεν
φιάλη [σταθ]μὸν Η΄
- Ἡφαιστίων ἐν Κεραμεκῶ
οἰκῶν, ἀποφυ[γῶν] Ἐξηκέ-
20 στον Οἶο]νέα

These three inscriptions—No. I upon a slab of marble, Nos. II and III upon the two sides of a fragment of Hymettian stone—were found in Dec., 1887, on the Akropolis, in front of the eastern entrance to the Parthenon, beneath the substructure of what is considered to be the temple of Roma and Augustus, supposed to have been built sometime in the vicinity of 20 B. C.

The slab upon which are cut the three columns of No. I is badly broken, and is worn so that in places the letters are almost completely erased. There are no internal means of dating this inscription, but, judging from the form of the letters, it should belong to about the end of the fourth century B. C. Nos. II and III are evidently cut by different hands, but at approximately the same time, both being somewhat later than No. I, if we can put any faith in the forms of the π as a criterion.¹ It is a curious fact, however, that of all the other numerous inscriptions found at the same spot (one of which, containing two examples of *koppa*, may possibly date as far back as the seventh century) not a single one can be placed later than the fourth century.

¹ DITTENBERGER, *Archäol. Zeit.*, 1876, p. 139.

As is readily seen from the number of parentheses in these inscriptions, abbreviations are exceedingly common, but in no case is there any doubt of what is to be properly supplied. On the other hand, in the case of several proper names of which some of the letters are entirely gone or hopelessly illegible, a certain restitution is impossible, since these (Ins. I, col. i, lines 8, 12, 20; col. ii, l. 3; col. iii, l. 1) are, as we shall see later, slave names which are often non-Hellenic. For example, in No. I, col. i, l. 12, a woman's name ends in *αν* or *ων*, either of which would be an anomaly if the name were Greek. In No. I, col. ii, l. 3, the last five letters are sure, and yet *σαμφος* cannot be the second element of any genuine Greek name.

In No. II, col. ii, l. 5, the first thought is to read *-σκι οἰκοῦ(ντα)*, but the letters *-σκι* are sure and cannot be part of the name of any Attic deme, which would be necessary with this reading; and, moreover, it would be contrary to the analogy of similar cases for any word to intervene between *οἰκοῦντα* and *φιάλη*. So I read as a proper name *Ἄ]σκιοῖκον*, which would refer to the father, as col. i, l. 5, and would be properly formed from *ἄσκιω-* and *οἶκο-ς*. In No. III, col. ii, l. 12, *Πειθέουον*, a new name, is certain. In l. 16 the first letter was omitted by the stone-cutter and afterwards prefixed outside the perpendicular line formed by the first letters of each line of the column. The first and fourth letters are indistinct, but the only possible restitution seems to be *Θουδόσιος*, a name found once in a pre-Eukleidean inscription.² At end of line 18, the stone-cutter has transposed the last two letters, *ωκ* for *κω*.

No. I is *στοιχηδόν*, and contains no diacritical marks. No. II has two dots after *σταθμόν* in every case, and once after an abbreviation. No. III has in place of the two dots after *σταθμόν* a curious square indentation, as if gouged with a sharp chisel.

These inscriptions are to be compared with a series of fragments, more or less complete, found at various times and now published in *C. I. A.*, II, Nos. 768-776. The subject of all of these is evidently the dedication of certain vessels, the weight of which is, in every case, one hundred drachmas; but what was the status of the dedicators, and what was the occasion of the dedication—that is to say, what is the exact sense of *ἀποφυγών*—are questions which have caused considerable discussion and are still by no means settled. The first publication of an inscription of this class was by Pittakis,³ who made the mistake of

² RANGABÉ, *Ant. Hell.*, 2269.

³ *Εφημερίς Ἀρχ.*, 1839, 124.

taking *καπηλός* and *καπηλῆς* as proper names, and who gave scarcely a pretence of an explanation. The same insc., with two others, is to be found in Rangabé, *Ant. Hell.*,⁴ where he takes *ἀποφυγών* in its judicial sense, and translates: *Un tel ayant été acquitté du procès que lui a intenté un tel, une fiole, son poids, 100 dr.* But this explanation ignores the fact, already noticed by Ross,⁵ that there is an evident distinction between the class of persons who are the dedicators and those whose names are in the acc., object of *ἀποφυγών*. The former are always spoken of as "dwelling in such and such a deme," *ἐν-οίκων*, a sure sign that they were not persons possessing the rights of citizenship. For example, a citizen from Alopeke could be designated only in one of three ways, *Ἀλωπεκεύς*, *Ἀλωπεκῆθεν*, or *ἐξ Ἀλωπεκῆς*, while *ἐν Ἀλωπεκῇ οἰκῶν* could refer only to a slave, freedman, or metic.⁶ Aside from this, it would seem in itself very strange, if it were a general rule for persons acquitted from any suit, whatever its nature, to dedicate a vessel of exactly the weight of 100 drs. in every case. Something more definite is required.

One of these inscriptions was also published by E. Curtius,⁷ whose explanation is, that certain slaves had escaped from their masters and gained their freedom by taking refuge in the temple of some divinity, and that they had afterwards dedicated these vessels as thank-offerings to this divinity. But we know, from various literary sources, that the only privilege a slave gained by taking refuge in a shrine was that of being sold to a new master.

The subject is next taken up by Köhler in the *Mittheilungen* of 1878, where he disposes of the theories of Rangabé and Curtius, for the reasons already stated, and publishes in this connection an inscription which is a list of silver urns (*ὑδρίαί*) that the treasurers, presumably of Athena, had made *ἐκ τῶν φιαλῶν ἐξελευθερικῶν*. He conjectures, rightly I think, that these *φιάλαι ἐξελευθερικάι* belong to the same category as those in the inscriptions under consideration, and that fifteen of them have been melted down to form each *ὑδρία*, the weights of which, as given, fall little short of 1,500 drs. Considering it, then, as reasonably certain that the dedicators of the *φιάλαι* are manumitted slaves, he proceeds to discuss the manner in which they obtained their freedom. The

⁴ Nos. 234, 881, 882.

⁵ *Die Demeu von Attika*, p. 50.

⁶ In one pre-Eukleidean inscription the word *metic* is expressly used: ΚΕΦΙΞΟ-ΔΟΡΟΜΕΤΟΙΚΟΕΜΓΕΡ: C. I. A., i, 277.

⁷ *Inscriptiones Atticae duodecim*, vii.

hypothesis of Curtius is, as we have seen, utterly untenable, and we have to choose among the following three methods of emancipation.

First, the State could, in return for or in anticipation of some important service, grant freedom and even citizenship to a slave. Thus freedom was granted to slaves during the siege of Thebes by Alexander the Great,⁸ and at Athens both freedom and citizenship to all slaves who had taken part in the battle of Arginousai.⁹ Moreover, it seems to have been a law at Athens, that slaves who gave information of some serious crime should be rewarded by freedom.¹⁰ Naturally, in all cases of this kind the master was recompensed by the State, as is expressly stated in the passage of Plato just cited.

Second, a master might set his slave free without recompense, in return for general faithfulness or some special act of devotion. This point, in conjunction with that just touched upon, namely, freedom granted to informers, is well brought out by Lysias,¹¹ who speaks of the danger that slaves οὐκέτι σκέψονται ὅτι ἂν ἀγαθὸν εἰργασμένοι τοὺς δεσπότας ἐλεύθεροι γένοιντο, ἀλλ' ὅτι ψεύδος περὶ αὐτῶν μηνύσαντες.

The third and most common method by which a slave gained his freedom was by actual purchase. This leads to the inquiry as to what class of slaves at Athens would be most able and likely to avail themselves of this privilege. Now, aside from the State-slaves, which do not in the least concern us, there were four distinct classes, (1) household servants in personal attendance on the master; (2) slaves let for hire, either for mining, for factory-work, for naval service, or even as private servants; (3) slaves who were workmen in their own master's mines or factories, such as the sword-cutlers and couch-makers of Demosthenes' father, and the leather-workers of Timarchos;¹² (4) slaves who were allowed to carry on an independent trade, with the proviso that they should pay to their masters a certain fixed sum (ἀποφορά).¹³ Now, in the class of inscriptions under consideration, it is to be noticed that many of the dedicators of φιάλαι are men or women carrying on some humble trade; as, for example, we have frequently a wool-spinner (ταλασιουργός), a farmer (γεωργός), a leather-worker (σκυτοτόμος), etc., etc. From this fact, Köhler, in the article which we have been

⁸ DIODOROS, XVII. 11. 2.

⁹ ARISTOPH., *Ranæ*, 694.

¹⁰ PLATO, *Leg.*, XI. 914; LYSIAS, περὶ τοῦ σηκοῦ, 16.

¹¹ ἐνὶ καλλίῳ, 5.

¹² DEM., *Aph.* 816; *Timarch.* 97.

¹³ BÜCHSENSCHUTZ, *Benitz und Erwerb*, p. 195; BÖCKH, *Staatshaushaltung der Athener*,

discussing, reasons that the dedicators were slaves of class 4 who had bought their freedom by money gained in their trade.

Köhler acknowledges, as an apparent objection to his whole explanation of these inscriptions, a fragment¹⁴ where the position of the words for citizen and non-citizen are reversed. That this is, however, as he claims, due to the carelessness of the stone-cutter, I indeed believe, but, in my opinion, the weakest point in his explanation is the sense in which he is obliged to take ἀποφυγών, as "being free from" instead of its sense of "escaping from" or, in judicial language, "being acquitted of."

A new turn was given to the discussion by the discovery of a fragment¹⁵ upon which are portions of two columns containing the same phrases as those already found, but above these, in larger letters, two incomplete lines:

—τος Δημοτέλους τοῦ Ἀντ[ι]μάχου Ἀ[λ]

—οστασίου Ἑκατονβαιώνος [πέμπτ]ει ἐ[πὶ δ]έ[κα].

The first letters of the second line naturally suggest the restitution ἀπ[ο]στασίου and the explanation that the dedicators of the φιάλαι were manumitted slaves who had been acquitted of δίκη ἀποστασίου brought against them by their old masters. This theory was advocated by Schenkl,¹⁶ whose article I have unfortunately been unable to see; but, that he failed either to see or to meet properly the manifest objections to this explanation, I infer from the fact that Köhler, in publishing the complete series of these inscriptions in the *Corpus*, while noticing the δίκη ἀποστασίου as a possible explanation, recounts the objections without making any allusion to this article. The objection which he considers the most telling against the theory of the δίκη ἀποστασίου is, to quote directly, *Inter homines enim, qui patronum fuisse dicendi essent, saepius inquilini referuntur*. This of course refers to such cases as we see above,¹⁷ where the οἰκοῦντα shows that no citizen is meant.¹⁸

Another point which I think remains to be explained, whatever theory is adopted, is the fact that, in several cases, two or even three proper names are found in the acc. as object of ἀποφυγών. Where the two men are brothers (*C. I. A.*, 773, ll. 28, 29) the matter occasions

¹⁴*C. I. A.*, II, 772 B.

¹⁶*Zsch. f. Oesterr. Gymn.*

¹⁵*C. I. A.*, II, 776.

¹⁷No. I, col. II, l. 18; No. III, col. I, l. 7.

¹⁸In No. III, col. I, l. 5, we have a Theban mentioned who seems to be analogous to the Olynthian, but these cannot, I think, be metics. Willamowitz-Möllendorf considers the Olynthian an ἰσοτέλης of the time when ἰσοτέλεια was granted by Athens to the whole city of Olynthos, but this explanation can hardly stand for our Theban.

no difficulty; but in all other cases the two parties have no apparent relationship, and in many instances live in different demes.

Furthermore, no attempt has been made, as far as I know, to show precisely to which of the various classes of *ἔρανοι* we are to refer the *κοινὸν ἐρανιστῶν*, which occurs several times in the series of the *Corpus* and once in those published here.¹⁹

Let us first consider the *δίκη ἀποστασίου*, and see if the objections to it cannot be overruled, and, as a starting point, it will be well to quote in full the definition of Harpokration,²⁰ under *Ἀποστασίον*: *δίκη τις ἐστὶ κατὰ τῶν ἀπελευθερωθέντων δεδομένη τοῖς ἀπελευθερώσασιν, εἰὰν ἀφιστῶνται τε ἀπ' αὐτῶν ἢ ἕτερον ἐπιγράφονται προστάτην, καὶ ἂ κελεύουσιν οἱ νόμοι μὴ ποιῶσιν. καὶ τοὺς μὲν ἀλόντας δεῖ δούλους εἶναι, τοὺς δὲ νικήσαντας τελέως ἤδη ἐλευθέρους. πολλάκις δ' ἐστὶ παρὰ τοῖς ῥήτορσι, παρὰ τῷ Λυσίᾳ ἐν τῷ πρὸς Ἀριστόδημον καὶ Ὑπερείδῃ ἐν τῷ κατὰ Δημητρίαν ἀποστασίον. Ἀριστοτέλης δ' ἐν Ἀθηναίων πολιτείᾳ περὶ τοῦ πολεμάρχου γράφει ταυτί· "οὗτος δὲ εἰσάγει δίκας τὰς τε τοῦ ἀποστασίου καὶ ἀπροστασίου καὶ κλήρων καὶ ἐπικλήρων." Now, it seems to me that Köhler's conception of the exact nature of this suit, if we are to judge by the language of his objection as stated above, is not so broad as is warranted by this definition. His reasoning, if I understand it, is in substance this: there cannot be instances of *δίκη ἀποστασίου*, for, among those persons who would, according to this view, be *προστάται* in the case, metics are sometimes mentioned, but no metic²¹ could be a *προστάτης*. That this objection may have any force, one must infer the premise: there can be no instance of *δίκη ἀποστασίου* with which the failure of a freedman to choose his old master as *προστάτης* is not connected. But this is a point which I will not admit. We can see, from the definition of Harpokration, that this choosing of another person as *προστάτης* is only one of the ways in which a freedman may fail to perform his duties to his old master. We know that metics owned slaves at Athens, and of course a slave would be just as likely to buy his freedom from a metic as from a cit-*

¹⁹ No. III, col. II, l. 2.

²⁰ *Lexicon in decem Oratores Atticos.*

²¹ The objection, that these inscriptions cannot refer to lawsuits of any kind, because no metic could bring suit, need not disturb us: for, even if we grant that technically no metic could bring suit, whatever its nature (and even this is contested by WILLAMOWITZ-MÜLLENDORF, *Hermes*, XXII), in reality he and not his *προστάτης* would be referred to as the plaintiff. So, in *ISAIOS* (*περὶ τοῦ Πύρρον κλήρου*, § 3, and *περὶ τοῦ Αγρίου κλήρου*, § 9), women are spoken of as bringing suit, though technically it must have been brought by their *κύριοι*.

izen master. We have no reason to doubt, either, that the metic master could hold his freedman to certain duties, though it is evident on the face of it that one of these could not be to choose him as *προστάτης*. For such duties we have plenty of scope in the phrase of Harpokration, *καὶ ἃ κελεύουσιν οἱ νόμοι μὴ ποιῶσιν*. But what did the laws at Athens demand? Unfortunately, we are not very well instructed on this point, since the orations mentioned by Harpokration, as well as others on the same subject which we know to have existed, are no longer extant. Almost our only information is given by Plato,²² who states that the duties of a freedman consist in going to the house of his old master three times a month to offer to do for him whatever is reasonable and possible; to consult his master's wishes in the matter of marriage; and not to acquire more property than he. But, however scanty our information may be as regards Athens itself, we have much more precise information of the state of things in other parts of Greece, thanks to the immense number of manumission decrees which have been found. These acts of manumission were effected, for the most part, through the intervention of a divinity.²³ The slave, as having no political rights in his own name either before or after manumission, took pains to insure his freedom by placing the act under religious sanction, and, instead of paying the money directly to his master, took it to the priests, and with this "the gods" bought the slave. The divinities through whom the manumission was effected varied in different cities according to local cult. At Naupaktos, Amphissa (of Ozolian Lokris), Elateia, and Stiris, the divinity was Asklepios; at Daulis, Athena Polias; at Orchomenos, Isis and Sarapis; at Chaironeia, Sarapis, Artemis Eileithuia, and, once, the Great Mother; at Lebadeia, Zeus, the King, and Trophonios; but by far the most popular intermediary was the Pythian Apollo at Delphi, where over five hundred of these manumission decrees have been found.²⁴

If, in considering these, we turn our attention first to the persons who made the sale or manumission, we notice (1) that several of these are women, whether it be that women had actually more legal rights at Delphi than at Athens, or that, as M. Foucart conjectures, they were allowed to act in their own capacity, owing to the semi-religious char-

²² *Leg.*, xi. 915.

²³ FOUART, *Mémoire sur l'affranchissement des esclaves par forme de vente à une divinité*.

²⁴ CURTIUS, *Anecdota Delphica*; WESCHER & FOUART, *Inscriptions recueillies à Delphes*; *Bulletin de Correspondance Hellénique*, 1881.

acter of the manumission; (2) besides Delphians, there are many from the small towns of Phokis, Lokris, Boiotia, South Thessaly, in one case an Athenian, and rarely persons from even remote cities, such as Syracuse. Some came from places that possessed shrines under the sanction of which manumissions were sometimes given; as, for instance, Amphissa, Naupaktos, Daulia. There are also three cases of resident foreigners, or metics as they would be styled at Athens: ἀπέδοτο Σωσύλος Κεφαλλάν, ἐν Δελ[φοῖς οἰκέων]; ἀπέδοτο Μένανδρος Κλεοξένου Θελπούσιος ἐν Δελφοῖς κατοικέων; ἀπέδοτο Τείσων Πλυνγονεύς ἐν Δελφοῖς κατοικέων.²⁵ The third and most important point for this investigation is, that there are many instances in which two or more persons of no relationship whatever manumit the slave together; *e. g.*, ἀπέδοντο Ἀρτεμίδωρος Ἀπολλωνίου Ἀθαμβος Ἀβρομάχου, Κλέων Δημοσθένης, Διονύσιος Ἰρανίωνος Παιδάριον, κτλ.²⁶; ἀπέδοντο Δικαία Ἀπολλοδώρου, Αἰτωλά, Ἀγησαρέτα [Γεν]ναίου, Δελφίδες, κτλ.²⁷ I have noticed as many as twenty instances of this kind among the Delphian inscriptions, besides a few from other parts of Greece; so that it seems to have been by no means uncommon for several persons²⁸ to possess and manumit a slave together. Therefore, we ought no longer to see any difficulty in the fact that two or even three names appear in our inscriptions as object of ἀποφυγών; and, as for the fact that they are of different demes or even of different cities in one case, we have a good analogue in one of the inscriptions,²⁹ where an Amphissan and a Delphian free a slave together. In many cases a slave was left absolutely free, and could "run off" and do whatever he wished"; but very frequently certain restrictions were added in the documents, which it will be interesting to look over as suggestive of what might have been the corresponding requirements at Athens. One of the most frequently recurring formulae is: "Let—(slave) remain with—(master), as long as—(master) lives, doing whatever is ordered as far as possible without reproach." To this is occasionally added the command to see to the proper burial of the master and to crown his tomb twice a month. Sometimes the slave is required to serve his master only a certain period of time from date of the act, ranging all the way from two to ten years,

²⁵ W. & F., 169, 200, 346.²⁶ CURTIUS, *Anec. Delph.*, 6.²⁷ W. & F., 301.²⁸ An example of joint ownership of slaves at Athens is furnished by *LYSIAS* IV, where the working of the system is, as we might naturally expect in many instances, not altogether satisfactory.²⁹ W. & F., 360.

after which he shall be absolutely free. One unusually sharp Delphian, fearing that he will not get the full eight years' service called for in the agreement, stipulates that, if the slave be sick for more than two months, he must pay for the time lost. Sometimes the option is offered of paying a certain yearly sum in place of serving. Instead of staying with the master himself, the slave may be required to remain with some near relative of his, father, mother, wife, or children. In a few cases, the person with whom the slave is to remain has no apparent connection with the master, and these are probably to be explained as similar to an inscription³⁰ where the master frees his slave on condition of his remaining with a certain Apollodoros as long as he lives, *etc.*, while it is expressly stated that this Apollodoros had given the slave the money to buy his "freedom," so that the transaction was in reality no more than a sale from one party to another with the proviso that the slave should be free at the death of purchaser. In one inscription,³¹ a girl is required to take good care of her own father and mother in their old age, a happy picture of a real family, which, as M. Foucart observes, must have been rare indeed among slaves. Even when a slave is not required to remain in the service of his master, he may still be subjected to his trivial whims, as in some cases he is ordered to live in Delphi, in others to live anywhere but in Delphi. In one instance,³² a boy-slave is required to stay with his master a certain time and learn the fuller's trade, and, when he has learned it, he must produce all his goods in the house of his master. In still another case,³³ two brothers free a slave on condition that he shall assist one of them, who is a physician, in his medical practice for five years, receiving in return his "clothes and living." It is often stipulated that, in case the freedman die without children, his property shall revert to his old master, and it is possible that this is to be tacitly understood in all the acts, and that this custom was as firmly established at Delphi as at Athens, where it was a part of the legal code. Once, at least,³⁴ the advantage is on the other side, and the slave is to have the property of his mistress ("unless her son returns") after having deducted enough for funeral expenses. Not unfrequently the master, besides holding the slave for a term of service, contrives to obtain money from him in addition to the amount paid directly in the purchase. Thus we have one instance³⁵

³⁰ W. & F., 58.³¹ W. & F., 234.³² W. & F., 43.³³ W. & F., 134.³⁴ W. & F., 239.³⁵ W. & F., 66.

where the slave must stay and take care of his master during his life, and, besides this, must pay his master's "contributions to the tribes."

In some half-dozen instances, a slave is required to pay off an *ἐρανος*, and these deserve special attention as possibly connected with the *κοινὸν ἐρανιστῶν* of our inscriptions. The word *ἐρανος*, which in Homer has very nearly the sense of the English "picnic," is frequently used in later Greek in a technical sense referring to two species of clubs, both of which, as we know from the evidence of inscriptions, were found in many parts of Greece, but the functions of which were quite distinct.³⁶ The one species, in origin a social club for general amusement and revelling, by devoting itself to the cult of some divinity, usually non-Hellenic, assumed the character of a religious association. Its members were of both sexes and usually foreigners, slaves, or metics who desired to keep up the orgies of their national religion. The second class of *ἐρανοί* was of a strictly financial nature, a sort of mutual-benefit association. If any member desired for any reason to raise a large sum of money at short notice, the amount was collected, either by himself or by another for him, from the several members of the society. He must pay back to each member, either by installments or whenever his circumstances would permit, the amount contributed by him, so that the transaction was in reality nothing more or less than a loan with, perhaps, the advantage that no interest was charged. It was a strictly business operation in every way: the borrower was obliged to furnish a surety or endorser to the *ἐρανος*, just as we would have to do in the case of a private loan; and this surety was bound to pay back the contribution to the *ἐρανος*, in case the original borrower was unable to do so. The word *ἐρανος* is used both of the club and of the contribution, more frequently in the latter sense, as in the phrase *ἐράνους λέλοιπε* he left his contributions unpaid. Now, of these two kinds of clubs, it is the latter which we find referred to in these manumission decrees of Delphi: *e. g.*, Κατενεγκάτω δὲ Ἀριστῶ (the slave) ἡ Πλειστός [ὕπ] ἐρ Ἀριστῶ ἐν τὸν ἐρανον τὸν Βακχίου ἐπὶ τὸ Καλλικλέος ὄνομα ἀργυρίου τρία ἡμιμναῖα ἐν ἑτέοις τείοις ἄρχαι ἀ καταβολ[ὰ] ἐν τῷ Ἡρακλείῳ μνηὶ τῷ ἐπὶ Ἀνδρονίκου. Παραμεινάτω δὲ Ἀριστῶ [π]αρά Καλλικλῆ ἀνεγκλ[ή]τως ποιούσα τὸ ποτιτασσόμενον πᾶν τὸ δυνατόν, ἄχρι [κα] κατενέγκῃ τὰ τρία ἡμιμναῖα.³⁷ In addition to the purchase-money,

³⁶ MEIER-SCHÖMANN, *Der Attische Process*, p. 638 ff; FOUCART, *Associations religieuses*, pp. 3, 142 ff.

³⁷ W. & F., 89.

Καλλικλῆς imposes on his slave the payment of the loan which he had made from his club, and, as she is to pay by installments, he makes the still further gain of retaining her services till the full amount is paid. *κατενεγκάντω δὲ τὸν ἔρανον τὸν Ἀρχέλαος συνᾶξε ὁ Πράοχου τὸν τριακονταμναῖον.*³⁸ Here Ἀρχέλαος is the master, and evidently collected his own loan. In one case the master, instead of being the actual borrower, is rather the surety upon whom the duty of payment has fallen owing to the failure of the former, thus: *κατενεγκάτω δὲ Ἀφροδισία τὸν ἔρανον τὸν βρομίον οὗ ἐγγυνεῖ Ἰατάδας, μὴ ἀκαταβόλουσα μηδὲ καταβλάπτουσα Ἰατάδαν κτλ.*³⁹

If, then, we consider anew the *κοινὸν ἐρανιστῶν* of our dedication inscriptions, I think it will not be difficult to explain this phrase, under the theory of the *δίκη ἀποστασίου*. In the first place, we notice that, wherever the text is complete, it is *ἀποφυγὼν τὸν δαῖνα καὶ κοινὸν ἐρανιστῶν*. Let us suppose, now, that an Athenian had freed his slave, and among the conditions had set one to the effect that said slave should pay the debts owed by him to his club, or for which he was surety. There is no reason why this could not have happened at Athens, as well as at Delphi. If, then, the slave afterwards refuses to pay this debt, the master would bring action against him, under the *δίκη ἀποστασίου*, and would be vigorously supported by the *ἔρανος*, which would be as much interested as himself in the case; so that the freedman, if acquitted, would be spoken of as *ἀποφυγὼν τὸν δαῖνα καὶ κοινὸν ἐρανιστῶν*.

Let us now return to the Delphian inscriptions and discover in what manner a master could proceed against the slave freed by him, in case the latter failed to abide by the conditions of the manumission. In many instances, it is simply stated that, if a freedman fails to do such and such a thing, the sale shall be null and void, that is, he shall become a slave again, as was the penalty at Athens for those convicted in the *δίκη ἀποστασίου*. Very frequent, also, is the right assumed by the master to punish as he likes, or for anyone else whom he bids to punish as he likes with perfect impunity, only (as is sometimes added) they must not sell him into slavery again (*πλὴν μὴ ἀποδοῦσθαι*). But who was to decide whether the freedman had transgressed the agreement? Was the master, himself an interested party, to be the judge? We are enabled to answer this in the negative, on the evidence of nine inscriptions which make special provision for the tribunal before

³⁸ W. & F., 107.

³⁹ W. & F., 139.

which all disputes should be decided: *e. g.*, "If Sosias make any charge against Nikaias or Isthmos, let them be judged before three men (*ἐν ἀνδροῖς τριῶν*); and let whatever these may decide be binding."⁴⁰ "If Aphrodisia fails to do any of the things ordered by Echemēlos as it has been written (provided she is able), let them be judged before three men, whomever they may choose together; and let whatever these decide under oath be binding."⁴¹ "But if Amyntas or his son Amyntas bring a charge against Sotērichos, let them be judged before three men, whom they have mutually chosen, Diodoros son of Mnasiatheos, Kleudamos son of Kleon, Archelaos son of Thebagoras; and, whatever they decide under oath, let this be binding. And if anyone of the members dies during the years that have been written [*i. e.*, the eight years in which the slave must remain with the master], let them choose another in his place, and let the successor judge together with those who have been chosen in common [*κοινῶς*, M. Foucart's emendation for the *καὶ ὥς* of W. & F.]; and if Amyntas or Sotērichos does not wish to choose successors in place of the deceased members, one or more, the one of them who wishes may choose the successor, and let those who are selected, whether one or more, be empowered to act as the judges, as has been written above."⁴² In two instances, the tribunal is composed of the priests of Apollo together with a third person agreed upon by the two parties. Thus we see what, at Delphi, corresponded to the court of the polemarch at Athens, where the *δίκη ἀποστασίου* was tried.

Having now completed the survey of the manumission decrees, we ought by comparison to form a better idea of the state of things at Athens: though the analogy must not be carried too far, for the reason that at Delphi a manumission act was no more than a private agreement between two parties under religious sanction, all the law of the matter being included in each agreement; while at Athens many of the duties of a freedman to his master were fixed and incorporated in the code, though this was, as I conjecture, supplemented in many cases by a private agreement. Now there is no one of the various duties imposed on slaves at Delphi which might not be expected in certain cases at Athens; and I think it is sufficiently clear that Köhler is wrong in tacitly affirming, as he seems to do, that failure to choose a master as *προστάτης* is the only conceivable offence. Very likely, in many of the trials referred to in our inscriptions, this was actually the

⁴⁰ W. & F., 24.⁴¹ W. & F., 193.⁴² W. & F., 167.

cause of the masters bringing action. In cases where the masters were metics, this could not, of course, be the offence; in cases where the slaves were of the class carrying on an independent trade, it is extremely unlikely that the offence was failure to serve a given time; but we are not compelled to suppose the same conditions in each case. The point common to all is, that the freedmen had been accused of violating some one of the various duties imposed upon them by the law or by special agreement, had been brought up under the *δίκη ἀποστασίου*, acquitted, and in their thankfulness had dedicated *φιάλαι* of the weight of one hundred drachmas each.

CARL D. BUCK.

Athens, March 29, 1888.

A LAUGHING GIRL AND A STUDY OF COIFFURE:
A TERRACOTTA HEAD IN MUNICH.

[PLATE VI.]

The small but altogether charming feminine head which our photo-type plate reproduces in the exact dimensions of the original is one to which my attention was called, two years ago, by the kindness of Professor W. von Christ. It then had all the fresh and stimulating interest that attaches to every new addition, even to the oldest and richest collection of antiquities; for, when first shown to me, it had been but just acquired, together with some larger pieces, for the Royal Bavarian Antiquarium.¹

The subject, in this stray relic of that miniature plastic art in which the discoveries of Tanagra have shown us that the Greeks excelled no less than in works of more ambitious scale and costlier material, is that least serious of all serious subjects, a laughing girl. The face, with its saucy twinkling eyes and smiling luscious lips half-puckered to a kiss, is full of mischief, and we suspect in the plump cheeks the rosiest of complexions. Assuredly we have not to deal with any mythological conception. This is not the head of any goddess, nor yet of an attendant on divinity, but of a simple mortal maid, decked out, indeed, as we shall see, in the gaiety of holiday attire.

Yet a sceptical friend asks, what guarantee is there that we have here a daughter of Eve and not something in the way of youthful masculinity, *e. g.*, a young Dionysos. One could wish the preservation of the completer form permitted him to refer the sceptic to all the

¹This collection is one that no amateur should fail to visit on passing through Munich. Since its reorganization as one of the State institutions, and especially of recent years under the able direction of Prof. von Christ, this somewhat heterogeneous agglomeration of antiquities and smaller antiques of every kind and class (originally formed as the private collection of King Louis I) has not ceased to keep pace with recent discoveries by such judicious accretion as small and occasional appropriations will permit. Nevertheless, it is too much overshadowed by the vicinity of the larger collections of the Bavarian capital.

It is a pleasure to give credit, for several suggestions pertinent to the subject of this paper, to the lively and sympathetic interest of its long-time Director and enthusiastic upholder, who is at once my own most valued teacher and friend.

features which Horace, reading in them the character of his friend's sweetheart, innocently extols: *brachia et vultus terebesque suras*. An unkind fate has left us only the neck and face intact, together with the hair, to which I shall revert. Still, since the lion may be conjecturally reconstructed from an isolated claw: what principally goes to prove muliebriety of sex, in this instance, is the extreme softness, in their smallness, of all the lineaments. The one feature my doubting friend can reasonably adduce in support of his hesitation is the unfeminine thickness of the neck, as it presents itself in the front view of our plate; but this very fault—for fault it certainly is—finds its explanation in the endeavor to reproduce a neck of unusually well-turned roundness, and fitted to comport with the altogether feminine plumpness of the chubby cheeks and sensitive double chin. I should lay most stress, however, on the formation of the eyes. One of the ancient writers on physiognomics distinguishes the sexual types of the human eye as τὸ λεοντῶδες, the leonine or masculine, and τὸ βοῶδες, the bovine or feminine. The characterization really pertains to the brow rather than to the ball of the eye and its more immediate framework, and it cannot be denied that in the case of our laughing girl the criterion is not at fault. Her eyes and eyelids are advanced so nearly to the level of the more protruding parts of her face as, in the profile view of our phototype, to catch as full an illumination as forehead, nose, or cheek. This effect is even enhanced by the softened outline of the lower lid. This is the rendering (familiar in the later Praxitelean type of Aphrodite, the goddess of all womanly charms) of what the Greeks designate with the curious phrase τὸ ὑγρὸν τῶν ὀμμάτων, a locution which seems to cover whatever most pertains to the sensibility of the ocular organ. How much the expression of merriment produced by the upward contraction of the lower eyelids is helped by this softening of their outline, and how little it is confined to the muscles of the lower half of the face, will be plain if the reader will contemplate the upper half by itself.

The Anakreontic character in sculpture, whether on a large or on a miniature scale like that of the example under consideration, dates in the main from the third century B. C., and the many-sided elaboration its minor artists gave to the development and treatment that Skopas and Praxiteles had given, in the age of Alexander, to the kindred group of subjects offered by the god Dionysos and his riotous train. The famous bronze satyr from Pergamon, which Professor Furtwängler

has made the theme of a capital monograph, may serve as the type of that elaboration and of the part played in it by the artistic centres of Asia Minor. We shall, then, not be surprised if an Asiatic provenance be assigned to a terracotta that shows the essential characteristics of a figure from among the amorous band of the Dionysiac revellers transferred to an every-day human subject of individualistic *genre*. It will be seen, further on, that what constitutes the most remarkable peculiarity of the little head points to the same Hellenistic rather than Hellenic region of the Greek world. To the unguaranteed particularization of Smyrna as the place of discovery of this terracotta, I can assign no value whatever, in view of the notorious unreliability of the sources of such market indications. We can accept the designation, at most, only as recording the place of purchase, *i. e.*, as affording not more than corroborative warrant of an Asiatic origin that would otherwise have its only basis in reasonable conjecture.

If the slave-trade supplied a strong sprinkling of barbarian blood in every Greek community, it was least of all lacking on the Asiatic shore, where a semi-Greek population had supplanted the already sufficiently heterogeneous native elements, and the art of the age to which I would assign the production of this figure notoriously applied its skill particularly to seizing and assimilating a variety of barbarian types. In view of this instance it is intelligible that there should have seemed to be a certain piquancy in the new models and their departure from a norm that the schools had followed long enough to make it tiresome. And the more naturally will barbarian blood be accounted for, if we consider our subject to have been a slave-girl. Her coiffure, unique as far as I know, will then appear to be one of the appurtenances of her barbarism. It is indeed curious, and more so, even, than the photograph betrays. Instead of any of the more or less familiar Greek coiffures of which Stackelberg collected the principal types in his *Graeber der Hellenen*, this terracotta offers an arrangement of feminine hair that is entirely new. The whole head was simply covered with aduncous prominences that scarcely differ from so many horns. Could they be called curls, their profusion would furnish a good type for one of Andromache's (δμῳαὶ ἐνπλόκαμοι: *Il.*, XXII. 449) curly-headed serving-maidens. Were they knotted, another illusion would vanish with the certainty that curl-papers were known to antiquity also. Fragile forms thus uniting with fragility of material, the damage the little head has suffered through breakage is considerable. Scarcely any of the cornute

projections are intact. In one place, plainly visible in the profile view of the face on PLATE VI, a number are so fractured as to produce the misleading semblance of a non-existent ivy-wreath. In the *Onomastikon* of Polydeukes, apt to be so full of vocables, if not of information on such subjects, I find no term that could be applied to such a coiffure as this. But a better than Polydeukes defines a certain mode of doing up the hair by the word *κέρας* = "horn," and the wearer is no other than Paris, the Phrygian prince.² Apparently, the only published example of this style of head-dress is given by Helbig³ on a male head, whose hair is done up in four *κέρατα*, in less elaborate style than our head, which is divided into twenty such decorative appendages.

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² HOMER, *Iliad*, XI. 385: τοξότα, λωβητήρ, κέραι ἀγλαέ, παρδενονίπα—the abusive words ejaculated by Diomedes when Paris has wounded his foot. The scholiast (ARISTONIKOS) explains: "ὅτι κέραι οὐ τῇ τριχὶ φιλωῖ, ἀλλ' ἐμπλοκῇς τι γένος."

³ *Das Homerische Epos aus dem Denkmälern erläutert*, 2nd ed., pp. 241-2, fig. 74.

AN ARCHAIC PATERA FROM KOURION.

[PLATE VII]

In the Cesnola Collection in the Metropolitan Museum, New York, is an archaic silver patera from room *D* of the temple at Kourion (CESNOLA, *Cyprus*, p. 326). We reproduce it here in the size of the original.

The central medallion, probably a rosette, has entirely disappeared. Of the first ornamental zone only two lotus flowers remain; but the juxtaposition of the flowers suggests an ornamentation of purely floral design, or of flowers interspersed with figures, as in the case of other pateræ from Kourion and Golgos (*Cyprus*, pp. 316, 337, pl. xi). The second zone, bounded above and below by the torsade or twisted rope ornament, contained ornamentation partly symbolical (composite animals on either side of the Phoinikian palmette or sacred tree) and partly pictorial (a huntsman in rapid pursuit of long-antlered stags). The sacred tree, placed beneath the principal figure on the outer zone, assists to fix the eye upon this spot as the centre of interest; while the movement of the hunting-scene, in the reverse direction to that upon the outer zone, secures for itself an independent significance. If we may look for more than mere decoration in the hunting-scene, a local interpretation may be found by describing it as the Phoinikian Herakles chasing the stags of Apollon, emblematical of the religious conflict between the Phoinikian and Greek constituents of the population of Kourion.

In contrast with this is the peaceful scene of the outer zone. It is a banquet-scene. The two chief personages recline upon couches on either side of a table laden with fruit: behind them are musicians, an amphora, a second table, and attendants bringing offerings. The meaning of the scene is not self-evident, and for its interpretation we must frame an hypothesis. The reclining figures appear to be of opposite sex, and might be interpreted as husband and wife, king and queen, or god and goddess. But we should naturally expect the family banquet to be represented in a different manner. In the Feast of Assurbanipal (PERROT and CHAPIEZ, II, figs. 27, 28) the king reclines upon a couch, while the queen is seated upon a chair. Upon a sarcophagus from Golgos (CESNOLA, *Cyprus*, pl. x) the females are seated upon the couches

on which the males recline. Similar modes of representation occur in banquet-scenes in general, upon Kypriote as well as upon Greek and Etruscan monuments. In Roman times, this became the established method of representing divine as well as human banquets: witness the reliefs and vase-paintings, and the following passage from Valerius Maximus (*lib. II, cap. 1, § 2*): *Feminae cum viris cubantibus sedentes coenitabant: quae consuetudo ex hominum convictu ad divina penetravit; nam Jovis epulo ipse in lectulum, Juno et Minerva in sellas, ad coenam invitantur. Quod genus severitatis aetas nostra diligentius in Capitolio quam in suis domibus servat: videlicet quia magis ad rem pertinet dearum quam mulierum disciplinam contineri.* Upon this patera, however, the female occupies a separate couch which is higher than the other, and in the scheme of decoration holds a more important position. Hence, we suggest that she represents the Kypriote Aphrodite, and that her youthful consort is Adonis. Between them is a table laden with fruit, which we recognize as the *φοινικοῦν μάλον*, or pomegranate, sacred to both divinities and symbolic of the fruitfulness of their union (VICTOR HEHN, *Kulturpflanzen u. Haustierte*, pp. 192-98). The round object which each holds appears to be the pomegranate. On either side of the basket of pomegranates is figured the table-cloth, which, like the covering of the couches, is drawn without regard to perspective. The three musicians follow the same order as on the archaic bronze patera from Idalion (CESNOLA, *Cyprus*, p. 77), first the double pipe, then the lyre, then the tambourine. The difference in the arrangement of the hair or head-dress of the last musicians may be remarked. In the Idalion patera, we observe a difference in costume between the player of the double pipe and of the lyre, and that the two costumes alternate with each other in the band of attendants. This seems to indicate both the diverse origin of the two forms of music and their union in the cult of Aphrodite in Kypros. Behind the musicians follows an attendant with wine jug and cup. Next is a huge Bacchic amphora with geometric decoration, and a table upon which are vases and *simpula* for the *σπονδαί* which were offered to Aphrodite (ATHEN., XII. 310). The amphora and table for liquid offerings serve to more completely represent the Aphrodisiac or Adonis festival which is here portrayed, and at the same time to divide into groups the continuous band of figures: the groups, however, are not symmetrical. Next in order are the attendants. The first brings trays of fruit; the second carries two long-necked jugs (cf. PRISE D'AVENNES, pl. *Art Industriel, vases des tributaires de Kafa*,

No. 5); the third carries branches. The subject reminds us of the attendants upon an Assyrian royal banquet in the Kouyundjik reliefs (LAYARD, *Mon. of Nineveh*, 2d series, pls. 8, 9). Last of all is the dove, sacred to Aphrodite. The remaining figures of the outer zone probably also consisted of attendants and musicians. On the under side of the patera is a brief and somewhat defaced Kypriote inscription, which has not been deciphered in time for this publication.

In style the archaic patera from Idalion is closely related to this one from Kourion. The Idalion patera seems to represent a festival in honor of Aphrodite. The goddess is seated upon a throne and holds a lotus flower and a pomegranate: the three musicians are present, and the tables of fruit and liquid offerings: attendants with united hands are led by one of their number, who approaches the goddess, holding before her sacred symbols. The patera from Idalion is more carefully executed than the one from Kourion, but is inferior to it in conception and beauty. Both are rude, as works of art, and less strongly affected by foreign influences than other published Kypriote pateræ.

The scene figured upon our patera seems to be the autumnal Adonis-festival, in which honor was paid to both Adonis and Aphrodite. The famous festival to Adonis and Aphrodite given by Ptolemaios Philadelphos and Arsinoë at Alexandria was an autumnal festival, held in the twelfth Ptolemaic month (*i. e.*, October, see *A. J. A.*, I, p. 28). Gifts of ripe fruit were brought in silver baskets, and of Syrian incense in golden alabastra, and were placed before the god and goddess, who reclined on separate couches. In the song of the Argive maiden, Aphrodite is addressed as *δέσποινα, ἡ Γολγῶς τε καὶ Ἰδάλιον ἐφίλασας*, also as *Κύπρις* (THEOK., *Idyl* XV). Thus both song and festival look back to Kypros for their origin. Does not this patera furnish us with the prototype?

ALLAN MARQUAND.

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UNPUBLISHED OR IMPERFECTLY PUBLISHED HITTITE MONUMENTS.

III.

RELIEFS AT CARCHEMISH=JERABLÛS.

[PLATES VIII, IX.]

The most important site of the Hittite dominion, if not the oldest, was Carchemish, the modern Jerablûs, on the west bank of the Euphrates. Copies of the inscribed stones found there by George Smith and consul Skene, and sent to the British Museum, are published in Wright's *Empire of the Hittites*. But of the other and no less interesting bas-reliefs left there at the time no copies have been published, that I remember, except very imperfect woodcuts in the *London Graphic* of Dec. 11, 1880.¹ The Wolfe Expedition, stopping but a very short time at Jerablûs, took such photographs as the time and the condition of the sun allowed. PLATES VIII, IX are reproduced from these photographs. Of these, PL. VIII is of much importance, and is not figured in the *Graphic*. On a thick slab of black basalt, broken in two pieces, and which it required the combined strength of four of us to set in position for photographing, is the well-preserved representation of a beardless figure in low relief, her head covered with the flat-topped hat of the Assyrian deities and kings, the top of the hat being surmounted with the star-disk usually employed to designate Ishtar. The hat has two horns, projecting well in front, more raised and separated from one another than in corresponding Assyrian representations: two shorter horns project from the back. The long loose hair falls over her shoulders in ringlets executed with an approach to the Assyrian technique but more freely handled. In the palm of her right hand she holds what seems to be a tall narrow-necked vase, similar to those so often seen in the hands of a divinity represented on the seal-cylinders both of the ancient and neo-Babylonian empires: in her left hand she has the basket, or pail, borne before the sacred tree by the divine figures so often

¹ Reproduced in PERROT and CHUPIEZ, vol. IV, Appendix, figs. 390-91.

represented in Assyrian art. She is clothed in a short under-skirt, with a long, open and deeply fringed garment above it, from which advances one naked leg. She does not wear the Hittite shoes with turned-up toes, and her ankle and upper-arm are adorned with anklet and bracelet. The features are soft and pleasant, of a decidedly sensual type with thick lips and full chin and an approach to the Aiginetan smile so noticeable in Kypriote sculptures: they are equally distinct from the angular and uncouth primitive Hittite type and from the more massive Assyrian. The outlines are not sharp, as in early Hittite and Assyrian work, but well-rounded, and the details are carefully executed.

Whether this represents Ishtar, as the disk might indicate, or some other divinity, it is not very easy to conclude. The horns point to a divine figure, if not to that of a principal deity. The Nimrud sculptures given by Layard in his *Monuments of Nineveh* frequently represent a bearded figure (known to be divine by his wings) with two horns, but the king and other men in these sculptures are not represented with the horns. In the *Monuments of Nineveh* (I, PL. 65) are figured four images of seated divinities borne on the shoulders of men: two of these are female deities, one with one horn, and the other with two, and each of them has on the top of her round, flat-topped head-dress a disk like that of Ishtar. A different goddess, more like the nude Zarpanit, as Lenormant calls her, so common on Babylonian cylinders, with front face and hands supporting her breasts, is found on a cracked alabaster slab at Jerablûs (figured in the *Graphic*) and must represent a different deity.²

Two other black slabs, still standing in a corridor, are represented in PL. IX. They give the lower part of the bodies of two soldiers, apparently, wearing short skirts and boots with the turned-up toes. Between them is a more distinguished figure in a long robe, and with the toes not turned up; in fact, it would appear as if the feet were naked. These two slabs are represented as one in the rude cut in the *Graphic*, and the central figure is utterly misrepresented. These three figures evidently formed part of a procession of large figures, similar to those on the reliefs of Sargon II (in the Louvre), and their style proves them to have formed part of a structure erected after Assyrian influence had become paramount. Nothing remains to remind us of

² It is a great surprise to me that this slab was not sent to the British Museum. After photographing it we laid it on the ground, with the face downward, to prevent its being injured by the Kurds of the neighborhood.

the rude reliefs of Marash, Sindjirli and other sculptures of purely Hittite origin, and it would hardly seem that the same civilization could have produced them. The material, even, seems borrowed from their powerful neighbors ; for, instead of an easily-worked friable stone reminiscent of the rock-cut sculptures of the Hittite provinces of Asia Minor, the hard basalt, favorite material of the inhabitants of the Euphrates valley, is used. The technique also is Assyrian in its attention to the minutest details of costume, and in its careful finish. The rhythm of the composition and the cut of the long robe of the central figure are also a late imitation.

The stones sent to the British Museum from Carchemish include those found there with inscriptions, except two in alabaster which were thought too fragile to move. Nevertheless, the figures on these alabaster slabs are of great interest, and I am surprised that their face was not sawed off, and the stones sent in fragments. The larger basalt slabs it would have been difficult to move, even if worth while ; but the two pieces of the goddess described above could have been transported with no great difficulty.

In the reliefs here published, as well as in those on the same site which still remain practically inedited, we have an important addition to the small series of reliefs in which can be studied that phase of Syrian Hittite art which flourished, during the ninth and eighth centuries B. C., in that part of their dominion which was in closest relation with Assyria.

New York.

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NOTE.

VETULONIA AND EARLY ITALIC ARCHÆOLOGY.

[PLATES X, XI.]

Among the most debatable and debated of ethnographic and archaeological questions is that of the early Italic population, and thus far there have not been proofs sufficiently conclusive to establish among students a unanimity of opinion. Great help can be had from early Italic antiquities, and this was perceived by Professor Helbig in his recent pamphlet *Sulla provenienza degli Etruschi*: but there is as much dissent in regard to the genesis and history of the archaeological remains as there is for the more general questions of race and language, in respect to Umbrians, Pelasgians and Etruscans. Material is, however, being added every year to an archaeological fund that will soon be in a condition to give decisive evidence. For this purpose the excavations carried on during the years 1885 and 1886 in the early Italic nekropolis of Vetulonia (at Colonna, province of Grosseto), in the northernmost section of Etruria proper, have undoubtedly proved to be the most important of any made for fully a half-century. In some respects they are unique, and deserve more than a passing notice in the JOURNAL, where they have been summarily described (I, p. 447; II, pp. 92, 492-94). In one of the last numbers of the *Notizie degli Scavi* (Dec., 1887) Cav. Falchi, the discoverer and excavator of the site, published a preliminary memoir on the more important excavations, those of 1886: it is merely a careful description of the tombs and their contents, accompanied by six large plates. The following remarks are based on this report.

Vetulonia was known to be one of the great Etruscan cities from a passage in Dionysios of Halikarnassos (III. 52), where it is mentioned as one of the five Etruscan cities that fought against Tarquinius Priscus, and also from Silius Italicus' description of its importance, but its site was a mere matter of conjecture until the recent excavations at Colonna. Two nekropoleis of enormous extent have been opened, consisting of very early *well-tombs*, and representing traces of a civilization somewhat earlier in date than any previously discovered in Etruria: whether it be Etruscan or pre-Etruscan cannot now be decided.

Omitting any reference to these two nekropoleis as a whole, I will speak only of a small class of very remarkable tombs which stand out quite

distinctly from the great mass, both in shape and contents. They consist of cavities (of uncertain shape, owing to the disintegration of the mass), containing groups of sepulchral paraphernalia, marked on the surface by large circles of stones. These sumptuous tombs of chiefs were situated on the *Poggio al Bello*, apart from any others of inferior rank. The principal circle had a diameter of 17 met.; one, on its right, measured 16 met.; another, on its left, 12 metres. The stones that formed them were long and flat, placed close to one another and deeply imbedded in the soil. A few words will be sufficient for the two partly-preserved circles. That on the right, *the tomb of Mut*, was soon found to have been violated *ab antiquo*. Its contents, judging from the little that remained, were deposited in separate groups at different levels. Of special interest is a statuette of greenish porcelain, of Egyptian workmanship, with a hieroglyphic inscription identifying it as that of Mut, a mother-goddess often confounded with Isis. The rest of the objects—fibulæ, paalstabs, necklace, bronze clasp, gold spiral, etc., have in most cases their parallel in the ordinary well-tombs. The *Tomb of the two cones*, on the left, was so termed because its sole contents, so far as could be ascertained, were two large and heavy stone cones, supported on a mass of stones that appeared to have been thrown in originally without order, in the centre of an excavation about 70 cent. deep and nearly as large as the circle above it. This mysterious tomb seems never to have been violated. Many other stone circles, scattered over the mount, were examined, but all had been rifled of their contents and filled up with rubbish. The few objects found were of the same early character as those we are about to describe, and included an Egyptian amulet with a double representation of Bes, also many pieces of amber and glass.

The interest centres entirely in the middle circle which encloses the *Tomb of the Warrior*. Though the earth has fallen in and partly crushed its contents (through the pressure of the roots of plants during many centuries), nothing has been disturbed since the tomb was made, except the third group of objects in the centre of the tomb, which was removed by means of a shaft sunk from above. This tomb differs in construction from any of the well-known examples previously found. Its contents, however, resemble those of two groups of tombs, both of which belong to the earliest, or Oriental stage of Italic culture—the one group being best represented by the Regulini-Galassi tomb at Cervetri=Caere=Agylla, those at Palestrina=Praeneste, and the tomb of the warrior at Corneto=Tarquinii; the other group, by the tomb of Isis at Vulci, and the two Calabresi tombs at Cervetri. In the Vetulonian tomb, as in these cases, the majority of objects are certainly of Oriental origin—probably Phœnician.

The objects were arranged in five groups, each having a special character, and each without any protection but that of a large sheet of cork. The

first consisted mainly of objects in iron; the second, of bronzes in a large basin, and of terracotta vases; the fourth, of jewelry, arms and bronzes for personal or domestic use; the fifth, of a bronze and silver cinerary coffer, a bronze ship and other decorative works (without ware or arms). This arrangement shows that all five groups were dedicated to one and the same person. In the first group were two iron tires of chariot-wheels, a small saddle, two large bits (= Assyrian, and Bolognese), buckles, disks, and other details of a chariot. At a distance of about two met. from this group was the second, formed mainly of an immense basin, nearly hemispherical in shape, of beaten bronze, 84 cent. in diameter, and 26 cent. deep. It was full of bronzes, which were protected by a large piece of the bark of the cork-tree: the top of the basin was closed by a large and magnificent shield on which rested a helmet and a bronze patera. The shield was not for use, but was worked in relief in a thin plate of bronze with a decoration of zones defined by four successive series of circles enclosing lines of dots, which are separated by lines of small triple circles. This shield is almost identical with that found in the *Tomba del Guerriero* at Corneto= Tarquinii (*Mon. dell' Inst.*, tom. X, tav. X), whose contents will be more than once referred to as being of similar style and age to the Vetulonian. The basin contained, (1) two large (identical) candelabra, with four double arms, whose stem rests on four feet each surmounted by a lion or griffin, while its top is crowned by an open flower; (2) twelve *patera*, of similar form but of different dimensions, without feet or handles. In shape and in the ribbings into which the body of each is divided, they are almost identical with Egyptian vases (PRISSE D'AVENNES, vol. II, under *Art industriel*; WILKINSON, *Anc. Egypt.*, II, pp. 2-5, etc.; MASPÉRO, *Arch. Égypt.*, figs. 275, 276, 277, 285, 286). Near the basin were a number of bronze and terracotta vases in a more or less ruinous condition, one bronze vase being of a spherical shape with long foot and splaying mouth, and with horse-heads adorning its two handles and its cover.

The third group, which was in the centre of the tomb, has disappeared, as already remarked, but, from remaining fragments, it appears to have contained bronzes and many pieces of black earthenware. The fourth and fifth groups were placed on a much higher plane and nearer the surface than the others: this is surprising as they are by far the most valuable. Group four contained a bronze *situla*, within which was another circular bronze vase; a mass of bronze vases, which could not be preserved; and a basin, full, like that of group two, of metal objects, those in the centre being three large bronze kettles. The most interesting piece is a silver-gilt cup or *skyphos* of very primitive Phoenician workmanship in which Egyptian influence dominates. The remaining upper part of the cup is divided into four zones (PL. X, fig. 1), two wide and two narrow zones

in alternation. In the upper narrow zone, which forms a border, is a procession of birds and beetles from left to right, while a similar procession, with direction reversed, is seen in the third zone: palmettes are placed at intervals, and when this occurs, in the third row, two birds are reversed. The second and fourth rows contain processions of mythical animals: winged male and female sphinxes, winged horses, bulls, griffins, lions, etc. Similar animals are found on the archaic cista from Palestrina (*Mon. dell' Inst.*, tom. VIII, tav. XXVI) and in objects from the Regulini-Galassi tomb, but are very rare, being different and more unnatural than the usual forms of animals reproduced in archaic Oriental and Orientalized-Greek art: they are apparently earlier and more Phœnician than those in the frescos at Veii (Campana tomb), which seem imitated from some Corinthian vase. Together with this vase were two others of silver; a bronze candelabrum surmounted by a figure; a terracotta cup, or *kyathos* (PL. X, figs. 5-5'), of importance on account not only of the three winged quadrupeds worked in relief on its inside, but for the Etruscan inscription of forty-six letters on its foot [it is well to note here that the inscription was scratched irregularly in the hard clay at some time after the vase was finished, and that it does not necessarily make the vase itself Etruscan]; a *kantharos* with very large handles, having also raised Oriental figures of winged animals in the interior; a series of yellowish vases decorated with bands of red in simple linear ornamentation of the Græco-Oriental style, like those in the *Tomba del Guerriero* at Corneto. Of quite different art and origin is a narrow silver strip decorated with rude figures of crouching winged animals (perhaps winged lions and sphinxes) of one or at most two forms, indefinitely repeated (PL. X, fig. 2). They are to be compared to rude bronze figures of lions found in a Palestrina tomb (*Mon. Inst.*, x, pl. XXXII, Nos. 2, 7). This object is apparently of native manufacture, and belongs to a different class from those of Phœnician art, like the silver vase, the cinerary coffer, etc.

At a further distance of over two metres the fifth and most important group was finally discovered. Among minor objects there were: a tripod of same style as that of Palestrina but without decoration; a singular three-storied terracotta dish; a candelabrum; silver *fibulae*, etc. The two principal objects are: a vessel of cast bronze; and a bronze cinerary coffer, lined with silver plates. The vessel (PL. X^a) has been described in such detail in the JOURNAL (II, p. 493) that any further description would be superfluous.¹ The ring attached to the yoke between the two oxen shows that the vessel was intended to be suspended. There are pairs of domestic animals of many sorts, oxen, sheep, pigs, dogs, mice, etc., feeding on various parts of the deck—

¹ Falchi expresses some doubt whether the decoration at the prow is a stag-head or merely a two-branched trophy. The high object back of it can hardly have been meant for a human figure.

suggesting a sort of Noah's ark, a relic of a flood-tradition among the Etruscans. The rudeness and heaviness of the animals scattered over the deck are extreme, and place this object in a category totally different, in regard to origin, from the silver vase and the cinerary coffer. Its preservation is perfect in every part.

Less singular but more interesting artistically is the *cinerary coffer* (PL. XI). It has been almost completely ruined by the pressure of earth from above, but has been restored by Cav. Falchi (PL. XI, fig. 2) in the form of an oblong box, shaped like a temple with gabled roof, resting on four short legs. It is 68 cent. long, 25 wide, 26 deep and 41 high, and is formed of bronze plates beaten into shape and strengthened by four bronze bars whose projections form the legs. It is entirely covered with silver plates, fixed to the bronze with nails and enriched with a decoration *a sbalzo*. Cav. Falchi sees analogies to this form in the cinerary urns and sarcophagi (a most imperfect analogy at best), but fails to connect this coffer with a class of Egyptian boxes of exactly the same shape, with gabled roof and short legs (WILKINSON, *Anc. Egypt.*, II, p. 200; MASPÉRO, *Arch. Égypt.*, figs. 251, 252) usually decorated with paintings.² It was evidently through the Phoenicians that this shape passed to Greece and Italy. Within the coffer are still preserved the burned remains of the great chief, wrapped in a fine linen cloth of yellowish color. In this connection it may be well to quote (from the translation by Messrs. Leaf, Lang, and Myers) the lines of the *Iliad* (XXIV. 788 f.) that refer to Hektor's burial, in which we find striking analogies to that of the Vetulonian warrior:

"But when the daughter of Dawn, rosy-fingered Morning, shone forth, then gathered the folk around glorious Hektor's pyre. First quenched they with bright wine all the burning, so far as the fire's strength went, and then his brethren and comrades gathered his white bones, lamenting, and big tears flowed down their cheeks. And the bones they took and laid in a golden urn, shrouding them in soft purple robes, and straightway laid the urn in a hollow grave and piled thereon great close-set stones, and heaped with speed a barrow, while watchers were set everywhere around, lest the well-greaved Achæans should make onset before the time."

The decoration of the silver plates is thoroughly Oriental, or Græco-Phoenician. It consisted of rows of archaic animals, confronted, two by two, and separated by the sacred tree: there are winged lions, bulls, sphinxes and griffins, ducks and other birds, similar to those on objects in the Regolini-Galassi tomb and at Palestrina. There were two rows of these animals on the roof, and probably three on each side of the body, of the chest.

² This is a form that was perpetuated quite generally in the reliquaries, to contain the bones of saints, made during the early and late Middle-Ages.

Between each is a border formed of intersecting semi-circular lines ending in anthemias, exactly like that on an object found in an early tomb at Chiusi (*Mon. Inst.*, x, pl. xxxix^a). The feet have a more minute decoration, in two rows, of a succession of nude male figures standing between two erect lions, one of whose fore-paws the man grasps with each hand. This is a familiar Assyrian motive, borrowed by Phoenicians and Greeks, though it is interesting to find it in so early a work as this. The presence of the lotus-palmette, to represent the sacred tree between the animals, is also among the earliest in a Western object.

The art of the silver *skyphos* and of the coffer is very similar: both are of the style quite generally recognized, at present, to be Phoenician, the main difference being that the *skyphos* is, apparently, a slightly earlier and stiffer work, of less artistic merit. In the cup, Egyptian influence is predominant, especially in the birds; in the coffer, there is very little trace of any but Assyrian influence. Both are evidently imported objects, as are many others in this tomb: the great value and richness of the coffer would indicate that it might be a special order sent to some Phoenician metal-worker. In the strongest contrast with these works stands another class in this tomb, best represented by the vessel, the silver strip (p. 178), the candelabra, and the large circular bronze vases. The latter are rude works, probably of native workmanship. The horse-bits and other accoutrements (=Hallstadt finds), some of the fibulæ, the reindeer-like horns of the stag on the prow of the vessel, suggest a Northern origin; but, in reality, they may be attributed to the Etruscans themselves, at a stage slightly in advance of their more northern brethren at Felsina. The period of this Vetulonian tomb is not difficult to ascertain, within certain limits. The Regolini-Galassi tomb at Cervetri, with whose contents those of this tomb have great affinity, has been assigned to various dates between the ninth and seventh centuries B. C. Like the Vetulonian tomb, it contains a vase with an Etruscan inscription which may serve as a landmark. Professor Helbig (*Annali*, 1876), in a careful study on Phoenician art as illustrated in Italy, concludes that writing was introduced among the Etruscans between 750 and 644, and that it would not naturally have been employed on such objects before the latter part of this period. If we adopt this theory, the contents of the Vetulonian tomb, of the same period, would be dated slightly after 700 B. C., a date which would well correspond with what we know of the development of Phoenician and Etruscan art.

A. L. F., JR.

REVIEWS AND NOTICES OF BOOKS.

HISTOIRE DE L'ART DANS L'ANTIQUITÉ par GEORGES PERROT et CHARLES CHUPIEZ. Tome IV. JUDÉE—SARDAIGNE—SYRIE—CAPPADOCE : contenant 395 gravures, etc. 4to, pp. 829. Paris, 1887, Hachette.

Not the least of the merits of M. Perrot's great history is the pains taken to throw light on some of the most obscure and least studied developments of ancient art and archaeology. The last volume issued, which lies before us, deals almost entirely with obscure or little-known topics—Sardinia, Judaea, the Hittites—the first, so unattractive as to have appealed to none but a few specialists; the second, so slightly based on facts as to be an ever-fertile field for hypothesis and for fancy; the third, dealing with groups of monuments to which attention has been called only within the last few years, and of the origin, race and history of whose builders we know nothing. It is a far greater task on the resources of an author to deal with such intricate problems as are raised by these varied themes than to treat of a subject like Egyptian or Greek art in which history, religion, language, and monuments contribute their quota of assistance.

Sardinia.—In his volumes on Phœnicia, Perrot had frequently cited objects found in Sardinian tombs; but these nekropoleis with Phœnician contents are invariably along the seacoast. The native population of the interior remained unsubjected to any foreign dominion, until the Romans gained over it a series of dearly bought victories. The monuments and various products of the industrial arts that are found in this region, and which may easily be distinguished from those of the Roman period, show traces of Phœnician influence, but also form a whole to which we must allow an indubitable originality, barbarous though it be. M. Perrot gives great weight to a tradition according to which the first inhabitants of Sardinia came from Africa: they are identical with the *Shardana* of Egyptian monuments, and probably came from Asia Minor, joining in the attack on Egypt, after the failure of which they passed along the coast of Africa until they reached the point opposite Sardinia.

The typical monuments of Sardinia are the circular buildings called, by the natives, *nouraghes*. They are concisely described in the following words: "The *nouraghe* is a tower in the shape of a truncated cone, which probably terminated in a sort of terrace: it is built of blocks that are often enormous, especially at the base of the monument, and which diminish in

size as they rise from the ground." The blocks are generally unhewn and are never joined with mortar. A single low door leads into a narrow passage which conducts to a chamber, sometimes circular, sometimes elliptical, and often 6 or 7 metres high, vaulted with a pointed dome formed by the projection of the successive stone-courses, as in the well-known *tholoi* of Greece and in some of the "Pelagic" tombs of Italy. Sometimes a second story, with another dome, rises over the first, and a staircase leads to the summit. The *nouraghes* vary greatly in plan. Sometimes they are grouped so as apparently to form a system of defensive towers. Some consist of many chambers and have internal courts enclosed between a tall central structure and flanking towers. M. Perrot's conclusion is that the *nouraghes* were neither tombs nor temples, but forts where the Sardinians stored their valuables, and where they sought refuge in times of danger; and that the development of this idea can be followed in its various stages from the simple single *nouraghe* to the later and more complicated structures. He cites most appositely a passage from a work falsely attributed to Aristotle: "There are, it is said, in the island of Sardinia, buildings erected in the old Greek style; among other beautiful constructions, there are vaults arranged so as to present the most beautiful proportions." Certainly this cannot but refer to the *nouraghes* which are thus compared to the "Homeric" constructions of Greece. The *talayot* of the Balearic isles are similar constructions. Of almost equal interest are the tombs of Sardinia, which consist of three parts—a hemicycle; then a high stele; and finally a long, narrow trench, like the "Celtic" "covered alley."

In the plastic arts the Sardinians have left us a multitude of small bronzes—statuettes of men or animals, of very rude workmanship, and interesting mainly for their costume and attributes, for they seem to be faithful representations of the inhabitants. The largest series is that of warriors: some with short swords, others with long swords; a still larger number, archers. These statuettes were all mounted on blocks of trachyte, and put in hiding-places. There follows a study of metallurgy among the Sardinians, and an attempt to reconstitute their arms and utensils.

M. Perrot regards the *nouraghes* as erected, by invading colonists from the S. W. of the island, against the incursions of the barbarous native tribes whom they gradually confined, by successive advances, to the more mountainous districts; although he weakens this hypothesis by admitting that but little of the known remains can be attributed to a period anterior to the Carthaginian conquest, and that they show a culture subordinate to and derived from the Punic.

Judaea.—In treating of the chapters devoted to the archæology of the Hebrews, it is hardly possible to avoid taking exception, at once, to M. Perrot's fundamental idea, that there was no development of art of any

sort among the Hebrews; but that what they had was purely Phœnician. He asserts that, *as long as they lived on the soil of Judæa as a nation, the Jews were but a people of shepherds, land-laborers, and soldiers; they hardly possessed artisans for the exercise of those very simple trades that are absolutely necessary to any society with pretensions to a civilized life; and they even borrowed the greater part of their implements and their arms from their more advanced neighbors, the Philistines and especially the Phœnicians. This continued until the fall of Samaria and Jerusalem, up to the moment when the so-called captivity of Babylon, by dispersing the Jews, and obliging them to live among strangers, opened to them new ways and began to awaken among them aptitudes and tastes which would not have been in the least suspected from their past.* It is hardly necessary to take up the gauntlet against such prejudiced and sweeping unfounded assertions, which would make a *tabula rasa* of Jewish literature and history in order to reconstruct it out of the figment of a universal Phœniciomania. A people which could produce the greatest monuments of Oriental literature, possessed such a genius for government that it could preserve its independence for so many centuries against a host of powerful enemies, was prominent in poetry and music, and wrought out a language far more subtle, imaginative, and perfect than any other of Western Asia, is far more likely, *prima facie*, to possess artistic capabilities than an eclectic nation like the Phœnicians, a nation of merchants, without literature, without cohesion, without originality, with a debased religion, borrowed customs and a venal character.

The art which created the temple of Solomon was but an art of secondary importance, says M. Perrot—Phœnician art, which cannot be compared to any of the great developments of ancient or Christian architecture. This being the case, it is hardly possible to justify the interminable length of his study of the temple, spread over more than two hundred pages. The writer himself seeks to explain it by making an admission which contradicts the barbarism which he attributed to the Jews, a few pages before: "Jerusalem and Athens are the two real capitals of the ancient world." One stops to wonder how the capital of a tribe of mere shepherds, field-laborers and soldiers could play such a role! M. Perrot is an ardent disciple of the German rationalistic critics, and in a discursive preliminary chapter, in which he undertakes to give a concentrated history of the Jews, he develops the nomad question with considerable fullness. In chapter II, on *the history of the Temple*, there is: (1) a study on the topography of Jerusalem in ancient times; (2) a description of Mt. Moriah; (3) the different kinds of construction of the enceinte and the architectural forms inserted in them, in which a careful study is made of the remaining portions of the wall, of the substructures and caves, and an account of the history of the Temple in its various transformations, including a detailed contradiction of De

Sauley's theories. The third chapter treats of *the documents to be consulted and the method to be followed in attempting a restoration of the Temple*. Starting from the information gained in the preceding chapter on the position, foundations, arched galleries and other substructures of the Temple, M. Perrot here studies the texts that are of some assistance in attempting a restoration—*Kings, Chronicles, Ezekiel, Josephus, the Targumim and the Talmud*: he finds himself mainly on the description in *Ezekiel*, which is to form the basis of his restoration. Doubtless, it will take the reader some time to thoroughly apprehend the brilliant notion of M. Perrot, to construct an imaginary temple from a visionary model. His vision is not to restore the temple of Solomon, a building of small dimensions which played in the religious life of Israel but a secondary role; nor yet the temple destroyed by Nebuchadnezzar, that of the last Kings of Judah, a construction already far more complicated, but of whose irregular and confused arrangement we know but little; it is the temple of *Ezekiel*, a unique and singular combination of reality and fiction, the building which the prophet presents to his compatriots as the consolation and revanche for the evils of the past, etc. It sounds more like the enterprise of a Knight-errant, than a serious archaeological work, to base an appreciation of Jewish art almost entirely on the reconstitution of a building that never existed. The subject of the following chapter is *The Temple of Ezekiel*. Within a square plan of 500 cubits M. Perrot distributes the various buildings and courts, arranging them in relation to a subdivision of the entire ground-plan into ten small squares per side, or a hundred squares in all, each measuring 50 cubits per side. Then are fixed the ground dimensions and positions of the six portals, the temple and its three large dependencies.

It is certainly a most interesting, and, in a certain way, valuable piece of work to reconstruct this group of buildings, and we follow with curiosity the text as one after another the dimensions and relations of the different parts of the group are discussed, far more successfully and technically than they have ever been before. The result of the reconstitution is certainly imposing. We cannot here attempt to challenge its correctness in certain details. There follows a chapter on the furniture of the temple: the columns Iakin and Boaz, carefully restored, the brazen sea, the basins, etc. Leaving the Temple, M. Perrot continues his investigations on Jewish Sepulchral architecture, and assigns a late date to nearly all the rock-cut tombs hitherto known, believing, as he does, that none are earlier than the Asmonæan or Idumæan dynasties, with the exception of a simple tomb of Egyptianizing character, called "the monolith of Siloam." According to him, the Jewish tomb before the exile was but a secondary and inferior form of the Phœnician tomb, while in the period preceding the Roman conquest the influence of Hellenistic architectural forms was felt, producing such works as the

Tomb of Absalom. As regards secondary forms of religious architecture, M. Perrot studies the high-places, or *bamoth*, and identifies them with existing primitive remains of dolmens, menhirs, and other combinations of rude uncut stones. In speaking (p. 168) of a very primitive archway, under "the arch of Robinson," found by the English explorers in the valley of the Tyropœon (Jerusalem), M. P. considers it to be an early bridge between the western hill and that of the temple: "This first bridge could then belong only to the time of the Kings of Judah, and might date back even to Solomon himself. Pupils of the Egyptians and Assyrians, the Phoenicians, masters of the Jews, were acquainted with the principle of the vault; they may have applied it here as early as the tenth century." I am not aware of a single instance of early Phoenician architecture in which either the vault or the arch is used. M. Perrot should inform us what basis he has for this assumption. No grounds for it can be found even in his own volume on Phœnicia. Would it not be more reasonable to assume this early arch to be a remnant of a distinctively Hebrew architecture?

The Hittites.—These final chapters, treating of the early civilization of Northern Syria and Kappadokia, are the most important in this volume, and they give a far better rounded and more probable view of the subject than Wright's volume (*The Empire of the Hittites*). M. Perrot does not adopt the attractive theory of a homogeneous Hittite Empire, extending over Syria and part of Asia Minor, but agrees with Hirschfeld and others in believing that it was only on great occasions, like the wars with Egypt, that a union was effected, and that otherwise the Hittites of Syria even were divided into a number of small independent states, whose relations with their brethren of Kappadokia and other parts of Asia Minor, were but loose and unimportant. The author's theory is that the current of Hittite emigration was not from Asia Minor to Syria but the reverse. A chapter is devoted to the recent discoveries in Northern Syria, at Hamath, Jerablûs, etc., and in Eastern Asia Minor; to the history of the Hittites from Biblical, Egyptian, and Assyrian documents; and to Hittite hieroglyphs. The following chapter deals with the Eastern Hittites, those of Northern Syria. In his study of the meagre remains of Hittite architecture in this region, the ruins of Jerablûs=Carchamish and of Sindjirli furnish the main materials, where are still to be traced ruins of palaces not far different, on a small scale, from those of Assyria. The only building thus far known which may have had a religious character is the strange enclosure at Tarsos, called the *Deunuk-tach*, evidently a pre-Hellenic building. A very complete catalogue of monumental Hittite sculpture is given, and the early style is distinguished from that which shows the influence of Assyria—a difference shown even in the style of costume. A votive character is attributed to the numerous stelai with bas-reliefs which represent either offerings to some divinity or funeral banquets.

In Asia Minor, the seat of the Western Hittites, the remains are in a far better state of preservation: the sculptures, instead of being on movable slabs and stelai, are generally cut in the virgin rock. Historically speaking, M. Perrot remarks, "Hittites of the right bank of the Halys, Phrygians established near the sources of the Sangarios and the Maiandros, Lydians fixed on the lower course of the Hermos, these three peoples succeed one another, in space as in time, on what may be called the great axis of the peninsula and the main current of its history." In a single canton of ancient Kappadokia, the Pteria of Herodotos, are grouped the most important Hittite monuments of Asia Minor—those of Boghaz-keui and Eujuk. Everything at Boghaz-keui is attributed to a period anterior to Kroisos, who took the capital of the Pterians. Here are the ruins of two palaces, one of which was perhaps the summer residence, the other the winter palace, of the reigning prince, who was at the time of Kroisos a vassal of the king of the Medes. The city itself has, according to M. P., a perimeter of between 5 and 6 kilometres, and was defended by two strong citadels, most important specimens of primitive but skilful military architecture. The third and most interesting part is the sanctuary cut out of the rocks of Isili-Kaia—an open-air temple for great assemblies, whose natural walls are covered with long processions in relief. Five hours to the N. E. are the ruins of the palace of Eujuk, built on the plan of the Ninevite palaces and probably earlier in date than that of Boghaz-keui: the religious basreliefs with which it is adorned lead M. Perrot to conjecture that it was the palace not of a king but of the high-priest. Another chapter is given to the Hittite art to the north of the Tauros and this side of the Halys—in Phrygia, Lykaonia and Lydia.

M. Perrot is not so happy in his treatment of the industrial arts among the Hittites. He makes no use of Assyrian inscriptions which mention the many interesting objects presented as tribute or taken in battle from the Hittites by the Assyrian kings during the ninth and eighth centuries. The three bronzes which are published as Hittite seem, in their elongated forms, to present but few analogies to the rock-cut sculptures. The pages devoted to glyptics are very insufficient as an enumeration of monuments. Only a few examples are cited among the many that might have been. Considerable skill is shown in the general treatment of Hittite archæology, which is still in a state of infancy, owing to the fact that no excavations have yet been attempted, and that no progress has been made in the decipherment of the inscriptions. Perhaps it is to be regretted that so much topographic, geographic, and historic material is added, sometimes irrelevantly, to the distinctively archæological background.

A. L. FROTHINGHAM, JR.

PAPHLAGONISCHE FELSENGRÄBER. Ein Beitrag zur Kunstgeschichte Kleinasiens. Von GUSTAV HIRSCHFELD. Aus den Abhandl. d. k. preuss. Akad. d. Wissensch. zu Berlin v. Jahre 1885. 4to, pp. 52; 7 plates, 9 figs. Berlin, 1885.

This account of the Rock-Tombs of Paphlagonia not only presents us with an important series of unpublished monuments, but is also a sample of an excellent method in archaeological publication. By means of photographs, diagrams, and exact detailed description, Professor Hirschfeld first acquaints us with the monuments, then proceeds to draw some interesting conclusions.

The principal rock-tomb at Kastamuni (imperfectly published by CHANYKOF, *Z. d. Ges. f. Erdkunde*, 1, 1866, Taf. VI) presents the appearance of a temple *in antis*, with quadrangular piers having no bases, but crowned by rude capitals which suggest the Egyptian cornice. The triply-stepped architrave shows one curved and two flat members. On the tympanon of the high gable is carved in flat relief a female figure standing between two griffins. Behind the portico thus constituted is a cleanly chiselled quadrangular chamber with a shallow niche on the southern wall. The ceiling is of a remarkable character, apparently a reminiscence of tent construction. Across the middle are represented two ridge poles, from which the ceiling sags on either side. From the southern end of the portico we may reach three connecting chambers, two of which, in their peaked ceilings and panelled benches, present reminiscences of wooden architecture.

More distinctive in character is the finely-situated tomb at Hambarkaya in the valley of the Halys. In front of the portico is centred the rock-cut profile of a reclining lion between two half-lions, one at either end. As if cut in section, these present to the spectator the flat surface of the rocky hill-side, but are rounded off on the back and further side. Three columns, enclosed by a double-panelled framework, give apparent support to the sculptured gable roof. The low, tapering, cylindrical shafts are provided with bases, consisting of an enormous torus surmounted by a roundel. The capitals, of which too meagre a description is given, seem to consist of a roundel, surmounted by a larger torus or echinus moulding, and these again by a thin, non-projecting abacus. Upon the tympanon of the well-weathered gable are represented two lions facing each other. Behind each lion is figured a cock or bird. It would require a well-trained imagination to discover from the photo-engraving the rounded gable end with superposed lions, like those on the tomb-façades at Norchia, or the central akroterion, resembling that of the tomb of Midas. In contrast with the imposing façade is the sepulchral chamber, which is entered through a small opening 0.75 m. above the level of the portico. It is a plain, peaked-roofed chamber, across the end of which is a raised stone bench.

At Iskelib there are four rock-cut tombs, which show interesting variations. The largest (Iskelib I) has two heavy tapering columns between corresponding antæ. The bases are similar to those at Hambarkaya, but here rest upon a thin plinth. The capitals consist of a shallow scotia crowned by an abacus. Above the columns is a broad architrave surmounted by a high gable. The unsculptured gable contains only a central pilaster, the upper portion of which is broken away. On the left side of the broad portico is a step or bench, back of which is a semicircular arched niche. Behind the portico is a small opening leading to a relatively large sepulchral chamber with flat-arched ceiling and large stone bench. Iskelib II is a small tomb with a single column in front and sepulchral chamber to the right of the portico. Iskelib III, uninteresting on the exterior, is remarkable for its interior construction. From the deep portico access is had to a large quadrangular chamber, behind which is a narrow sepulchral chamber with two small stone benches. Reminiscences of wooden forms are seen in the flat mouldings which decorate the doorway and rear wall of the portico, in the pilaster-like supports for the gable roof of the quadrangular chamber, and in the panelling of the walls and benches of the sepulchral chamber. A small opening, like the window of an Egyptian *serdab*, leads from the portico through the thick wall into the quadrangular chamber. Iskelib IV shows considerable variation from the tombs already described. The heavy shafts with large torus bases, the surrounding double-panelled framework and the gable sculptured in low relief recall the tomb at Hambarkaya; but here the resemblance ceases. The capitals at Iskelib consist of the head and forepart of a lion, reminding us of the royal tombs at Naksh-i-Rustam. The low reliefs in the gable, two Erotes flying toward each other, and the winged griffin over the right end of the gable (this has escaped Professor Hirschfeld's attention) betray here the hand of a Roman sculptor. The further peculiarities of this tomb are an extremely narrow portico, barely extending beyond the bases of the columns; a small cross-shaped window leading from the portico directly to the sepulchral chamber; the tumulus-shaped ceiling of the sepulchral chamber, and the two stone benches placed at right angles to each other.

To the same class of tombs may be added a one-columned tomb at Tokad; another, described by CHANYKOF, (*Z. d. Ges. f. Erdkunde*, 1866, p. 424) near Tschangri; the monument described by HAMILTON (I, p. 401) and PERROT (*La Galatie*, p. 339 ff.; pl. 33) situated near Aladja; and the monument near Urgub (TEXIER, *Asie-Mineure*, pl. 92).

These tombs of Paphlagonia, from their rarity and from their isolated and expensive character, appear to be royal tombs, designed sometimes for a single individual, and occasionally for several members of a family. The open columnar porticos and gable roofs give the impression of a more origi-

nal and independent character than do the Ionic fronts of Lykian or the composite façades of Phrygian tombs. The interior construction and the raised benches in the sepulchral chambers suggest a closer connection with Etruscan than with Phrygian modes of burial. Forms which belong to wooden and even to tent construction, as has already been noticed, have determined the architectural details. The variation in the use and style of the columns, and in all the structural and ornamental details, suggest a derivation not from a fixed temple type, but from an every-day non-canonical architecture, which would lead us to believe in the pre-Hellenic character of these monuments, if not in an original Paphlagonian style of architecture.

Taken as a whole, the ancient monuments of Asia Minor are too varied in style to be classed together as Hittite. Not only may an eastern and a western group be distinguished, as was suggested by LENORMANT (*Gazette Arch.*, 1883, p. 121), but a northern and a southern. The monuments of the southern group betray a lack of independence and the strong influence of foreign styles, while those of the north show a self-dependent, artistic experimentation, with an ideal tendency almost Hellenic in character.

ALLAN MARQUAND.

DIE FELSENRELIEFS IN KLEINASIEN UND DAS VOLK DER HITTITER. Zweiter Beitrag zur Kunstgeschichte Kleinasiens. Von GUSTAV HIRSCHFELD. Abhandl. d. Berl. Akad., 1886. 4to, pp. 75; 2 plates, 15 figs. Berlin, 1887.

Having in a previous paper upon the Rock-cut Tombs of Paphlagonia been led to distinguish between the northern and southern as well as between the eastern and western monuments of Asia Minor, Professor Hirschfeld here applies the same principle of classification to the sculptural reliefs usually designated as Hittite. As an opponent of the Hittite hypothesis, his argument is limited to the consideration of a special class of monuments: hence his distinctions lose somewhat of the value that might have attended a broader and more independent treatment of the subject. In the enumeration and description of the monuments, he begins at the extreme west with the two reliefs of Nymphs and the so-called Niobe near Magnesia. From this point the western group is subdivided into a northern and southern. To the northern belong the ten Phrygian figures near the tomb of Midas (although they show also characteristics of the southern group); the giant warriors of Giaurkalesi; and the celebrated sculptures of Eujuk and Boghaz-keui. To the southern group belong the monuments at Efâtûn, Kokliteulu, Fasillar, Ibris, and possibly a few others, which

have been imperfectly described. Under the eastern or Syrian group are considered inscriptions and reliefs from Hamath, Jerablûs, Biredjik, Aintab, Sakschegeuzu, Sindjirli, Marash, and Run Kalah.

In comparison with each other the western group of monuments exhibits no direct connection with the eastern. In the entire Hittite country, extending from the Euphrates to the Orontes and from the Tauros mountains to Egypt, no monument has been found which compares in artistic quality with the sculptures of Boghaz-Keui or even with the relief of Ibris. Egyptian influences are felt in the winged disks at Boghaz-keui and Eflatûn, in the sphinxes of Eujuk, the *uraî* upon the caps of the warriors at Giaurkalesi and in the cartouches at Nymphi; but are wanting in the entire series of strictly Hittite monuments. Babylonian influence may be recognized upon both the eastern and western group of monuments; but in the western group it is clearer and stronger, and bears no evidence of having been received through the Hittites. Even the hieroglyphs found more abundantly upon Syrian than upon Asia Minor monuments seem to be of non-Syrian origin, being unrelated in form, and of finer quality than the larger sculptured reliefs. The hieroglyphs, though containing various heads of animals, show no traces of lions, leopards, wolves, foxes, and other such animals, which existed in Syria, and presumably would have figured in a system of hieroglyphs of Syrian origin. Having distinguished the sculptured reliefs of Asia Minor as non-Hittite, Professor Hirschfeld points to Kappadokia as the probable centre of Asia Minor art, and sounds the bugle-call for exploration in that country. He says "Kappadokia must again be thoroughly explored; it must be made the object of a special research, such as Ramsay has undertaken in Phrygia. Here, especially in Eujuk, the ground must conceal information which can be obtained no where else and in no other way."

ALLAN MARQUAND.

ARCHÆOLOGICAL NEWS.

SUMMARY OF RECENT DISCOVERIES AND INVESTIGATIONS.

	Page.		Page.		Page.
ARMENIA,	196	GERMANY,	216	KYPROS,	198
ASIA MINOR,	196	GREECE,	200	RUSSIA,	217
EGYPT,	191	HINDUSTAN,	195	SWITZERLAND,	216
ENGLAND,	217	ITALY,	207	TURKESTAN,	195
FRANCE,	215	KRETE,	207	TURKEY,	217

AFRICA.

EGYPT.

Mr. F. L. GRIFFITH, acting for the Egypt Exploration Fund, has started on a three weeks' exploring trip, with tent and camels, to El-Arish (Rhinocollura), near the Sirbonic Lake. Mr. Griffith will rejoin M. Naville at Bou-bastis toward the end of this month.—*Academy*, April 28.

BABYLONIAN TABLETS FROM UPPER EGYPT.—Professor A. H. SAYCE, writes to the *Academy* (of April 7) concerning the Babylonian Tablets, previously mentioned (p. 75), which have been found in large quantities at or near Tel-el-Amarna: "Most of the tablets contain copies of despatches sent to the Babylonian King by his officers in Upper Egypt; and, as one of them speaks of 'the conquest of Amasis' (*kasad Amasi*), while another seems to mention the name of Apries, the King in question must have been Nebuchadnezzar. The conquest of Egypt by Nebuchadnezzar, so long doubted, is now become a fact of history." The most curious of the tablets copied by Prof. Sayce "contains an inventory of the government property of which the Babylonian Satrap had charge. The objects of stone alone amounted to 6,840, and included two colossi and a *kukupu*, the name of which is *namgar*."

ALEXANDRIA.—Dr. SCHLIEHMANN, having obtained permission to excavate on the eastern side of Alexandria, after three weeks work dug in that part of the city two great trenches, in which he came upon many graves, and at last, at a depth of 12-14 metres, the foundations of a large building. In all probability they are the foundation-walls of one of the palaces of the Ptolemies, which, according to Strabo (xvii. 1, 8), occupied, together with beautiful public grounds, a fourth, or even a third, part of the whole extent of Alexandria.—*Academy*, April 28.

EL-ARISH.—Ptolemaic Shrine.—In a letter to the *Academy* (dated Cairo April 17) Mr. F. L. GRIFFITH reports on a visit he had just made to El-Arish, "the little town on the coast near the northeast frontier of Egypt where the tolls are levied on merchandise and animals coming from Syria." The former visitors to the place had reported the existence of a sarcophagus or naos. It was found to be a shrine "of black granite about four feet high and pointed at the top. It has been used for ages as a drinking-trough for animals, and is, consequently, much damaged. The interior, which was sculptured with figures and inscriptions, is much worn or covered with lime incrustations, one side is scaled off and the front has been worn down to the depth of an inch all over; thus the whole of the dedication is lost. However, one side and the back have each thirty-seven lines in fair condition. The text relates the history of the temple of Goshen under the reign of the gods, evidently in order to give it with all its adjuncts a respectable genealogy. It was visited by the god Ra; and, as the inscription on the back ends with a list of temples in Upper Egypt built by this god, it seems that the sacred localities at Goshen were to be put on a level in point of antiquity with those of the most celebrated cities in Upper Egypt. The local god, *Sepd*, is identified with the warlike Shu or Ares, in order to bring him into relation with the myth of the god-kings; and the other gods of the district are the spirits of the East who protect Ra (the sun) at his rising from the children of Apep. The temple is the eastern horizon on which the sun rests. There are some curious details and a description of the temple, which I reserve for the present. Of the later kings of Egypt, M. Naville found monuments at Goshen of Nectanebo II and Philadelphos. From the style I should attribute the El Arish shrine to Philadelphos."—*Academy*, May 12.

TELL BASTA=BOUBASTIS.—On Feb. 25, M. NAVILLE and his associates, Count d'Hulst and Mr. Griffith, recommenced the excavations of the great Temple of Boubastis (see vol. III, pp. 413-18), and in six weeks laid bare two-thirds of the temple area, discovering inscriptions, statues, and basrelief sculptures of great historical interest. The recent discovery of two black-granite statues of the unique Hyksos type, the lower part of a seated statue of a Hyksos king with the hitherto-unknown name of *Ra-ian*, and an architrave with the cartouches of Apepi, is of the highest importance, as it establishes beyond doubt the fact that Boubastis was a Hyksos capital. Scarcely less important are two statues of a scribe of the time of Amenophis III, and a fragmentary inscription, discovered on a block in the Eastern Hall, with cartouche of Aten-Ra (the chosen god of the heretic Pharaoh Khuenaten), which show the XVIII dynasty and the great Aten heresy to be represented in the Delta. Other finds supply fresh links in the history of the temple from the VI dynasty (another fragment of Pepi) to the period of Ptolemy Epiphanes (a fine Greek inscription). Also have come to light a statue

of Apries (the Hophra of the Bible), parts of statues of Rameses VI and Nectanebo I, and very numerous statues and parts of statues of Rameses II. They have also discovered the remains of a hall of Osorkon I (XXII dynasty). The western end of the temple (containing the sanctuary) is at present in process of excavation.—*Academy*, April 7.

M. NAVILLE writes to the *Academy* (of April 14): "We went on excavating the two halls discovered last year, going north and south to the limit of the blocks, so as to lay bare the whole width of the building. On the east, we dug out another and a yet larger hall, which was the entrance to the temple. On the other side, we entirely cleared away the Hypostyle Hall, and began clearing the western part, which is the widest, and which seems to have been built by Nectanebo I. We removed all the mounds of rubbish which divided the different parts of the temple, so that nearly its whole length, from east to west, is now visible, covered with huge granite blocks, interspersed with fragments of columns and broken statues. We have found (in the Eastern Hall) two very interesting statues of an official named Amenophis, inscribed with the cartouches of Amenophis III, besides the torso of a woman of the same epoch. The official, evidently a great man, was governor of the "Marshy Nomes"—a very unusual way of designating the Delta. Amenophis III is the same king of whom a monument has been found at Benha.

"Though the XXII dynasty is said to be of Boubastite origin, only two kings of this line seem to have worked at Boubastis—Osorkon I, whose name appears frequently with that of Rameses II in the Eastern Hall, and Osorkon II, who built the Festive Hall, and who has erased the cartouches of Rameses II and substituted his own: he also cut to pieces the numerous statues of Rameses II, and built them into the walls of his Festive Hall. The great ceremony there celebrated was not in honor of Bast, but of Amon, and it took place in the twenty-second year of his reign. Sheshonk I, the chief of the dynasty, appears only in a small limestone figure discovered a few days ago.

"The most interesting historical discovery of the present season is the fact that Boubastis, like Tanis, was an important Hyksos settlement. At the eastern entrance, built into a kind of bad Roman wall, we have found a colossal head of black granite broken in two at the height of the eyes. The projecting mouth, the aquiline nose, the high cheek bones, the sharp modelling of the cheek, are so exactly like the Tanis sphinxes at Bûlâq, that it is impossible not to recognize a Hyksos head. At a short distance were the feet and the colossal base of the statue showing erased cartouches. Hauling the base out of the water, and clearing the surrounding earth, the men came upon another colossal base of exactly the same type as the first, but in a much better state of preservation, the figure being perfect

as high as the knees: later, was found the second Hyksos head, nearly perfect. These two colossi evidently stood close together by the entrance to the temple. The cartouches are erased, but I presume that the name of the king was Apepi; for, on turning a heavy architrave in the Hypostyle Hall, we found a large cartouche of this great Hyksos ruler.

"In the Hypostyle Hall, at a very short distance from the architrave of Apepi, I observed a projecting corner of black granite, which looked like the base of a statue. After we had dragged it out of the mud, we found that it was the lower part of a statue of natural size, executed in the style of the XIII dynasty, with the feet resting on the nine bows. On the front of the throne, at each side of the legs, the cartouches and standard are in a perfect state of preservation. The inscriptions read as follows: 'The divine Horus who embraces the lands, the good god Userenra, the son of Ra, Raian, loving his *Ka*, everliving.' In the first cartouche there is a doubtful sign which I read User. That he should be the worshipper of his *Ka* (*i. e.*, of himself) is a very curious circumstance. Thus we have an absolutely new and unknown Pharaoh.

"We are now clearing the western part of the temple, and rolling the blocks of the Festive Hall, in order to discover the successive strata of names. Another fragment of Pepi has turned up, as well as the name of another king, who belongs to the XII dynasty. Between the Hypostyle Hall and the western part we have found no less than three statues of Rameses VI, more or less broken. I also discovered a monument of this king at Benha last year. These, I believe, are the first occasions upon which he has been met with in the Delta."

Regarding the name of Raian as the Pharaoh of Joseph, see letters in the *Times* from CH. RIEU; in *Academy*, April 28, from H. G. TOMKINS; May 5, from A. H. SAYCE.

Among the most important objects lately discovered is a shrine in red granite, a splendid work of the period of Nectanebo. M. Naville and Count d'Hulst will terminate this season's excavation at the end of the present month, and seldom has a winter's excavation of the Egypt Exploration Fund been so fruitful in important results. Among the recent visitors to Tell-Basta was Dr. Virchow, of Berlin, who was especially interested in the head of the Hyksos statue, of which he took the measurements in order to see whether they would give any hints respecting the much contested question of Hyksos nationality.—*Athenæum*, April 21.

FAÏÛM.—A report reaches us from Cairo that Mr. Flinders Petrie, who has been making excavations at the pyramid of Hawara in the Faiûm, has come upon the tomb-chamber.—*Athenæum*, April 21.

SIÛT=LYKOPOLIS.—Mr. F. L. GRIFFITH has been studying the rock-cut tombs here, and has determined the date of the great tomb known as Stabl-

Antar to be in the reign of Useratesen I (XII dynasty). Also, he has discovered that the upper ranges of tombs in the same cliff belong to the hitherto-unrepresented dynasties of Herakleoupolis (IX and X dynasties of Manetho).—*Academy*, April 7.

ASIA.

HINDUSTAN.

AZAMGARH DISTRICT.—*Genealogy of King Harshavardhana.*—A valuable archaeological find has been lately made in the Azamgarh district in the shape of a copper plate recording, in later Gupta characters, the grant by King Harshavardhana, of Sthānisvara, of a village to several Brahmans for the spiritual welfare of his parents and elder brother. The historical value of the record is that it gives in detail the genealogy of King Harshavardhana, who reigned from A. D. 618 to 642 over the greater part of Northern India, including Kashmir and Nepal, and whose court was visited at Kanauj by the Chinese Buddhist pilgrim Kiuen Kiangin, A. D. 637. The plate has been purchased by Government, and deposited in the Provincial Museum at Lucknow.—*Athenæum*, April 14.

BOMBAY.—At a recent meeting of the Bombay branch of the Royal Asiatic Society, M. Émile Senart, the French archaeologist, who has recently been travelling in India, delivered a lecture on the various inscriptions which bear the name of Piyadasi, the Asoka of Southern Buddhists, grandson of Chandragupta. The chief object of M. Senart's visit to India was to supplement by direct inspection the patient study of years which he has devoted to these inscriptions, in his opinion the most ancient dated monuments of India, the most ancient dated witnesses of its religious life and the progress of Buddhism. The result is that he has been able to settle the text of many passages hitherto doubtful. He read an interesting translation of the famous Edict of Toleration, and gave an account of the discovery by Capt. Deane, Assistant Commissioner at Hoti Murdan, of the new inscription at Shahbaz Garhi, which furnishes material for a perfect text of the edict.—*Athenæum*, May 5.

TURKESTAN.

ROCK-INSRIPTIONS.—M. Krasnoff has made some interesting discoveries in Turkestan among the rock-inscriptions: the men are always on horse-back, with bows, arrows, long pikes from which stream flags, and with curved swords. They are dressed like the present Khalat of the Mongols and Turks. The scenes relate to the chase; and among the animals shown is a very large one with a large hairy tail and tusks like those of the mammoth.—*Amer. Antiquarian*, May, 1888.

KOURGANS.—General KOMAROW, whose name was so well known in connection with the earlier stages of the Afghan boundary question, has given before the Russian Archaeological Society some interesting particulars of his investigations of the tumuli (kourgans) existing in the Trans-Caspian territory. Many of these are of large size. Very few articles were found, and these were chiefly made of horn and stone, and resembled those found in the province of Perm. They certainly belonged to a people of primitive civilization. In another of the tumuli after a heavy fall of rain the Cossacks found in a few hours 500 pieces of money of ancient date, but in this respect the ruins of the old town of Merv are expected to prove most prolific.—*Athenæum*, April 14.

ARMENIA.

The abbé Hyvernât has been charged by the French Ministry of Public Instruction with a mission in Asia, and especially in Armenia, to study the cuneiform inscriptions of Lake Van, to study the monuments of Hittite art to the north of Assyria, and also the neo-Syriac dialects of lake Ourmiah. —*Cour. de l'Art*, 1888, No. 18.

ASIA MINOR.

INSCRIPTIONS DISCOVERED BY MM. LECHAT AND RADET.—In the March number of the *Bull. de. Corr. Hellénique*, MM. H. Lechat and G. Radet publish a number of inscriptions found by them in Asia Minor during May and June, 1887. In No. 1, from Artaki, the epithet Δυνδυμῆ(ν)η (Mt. Dyndyme) is applied to Artemis for the first time in inscriptions. No. 2, from Ulubad, is surmounted by a basrelief representing a vessel at sea during a combat, commemorative of a fight in which took part all the sailors enumerated in the inscription. No. 3, from Muhalitsch, is a decree. No. 4, from Hamamlu, is a dedication. No. 5, from the same place, has two mutilated basreliefs. No. 6, from Esky-Tchatal, is a stele with two basreliefs. No. 7, from Abulliout, is a stele with two reliefs, both banquet-scenes. No. 10, from Isnik (Nikaia), is a decree of the γερουσία of Nikaia. No. 11, from Ghemlek (anc. Kios of Bithynia), is a sepulchral inscription, which is unique from mentioning, as a penalty for the violation of the tomb, five pounds of silver. Nos. 14, 15 and 17, from the same place, are stelai with basreliefs.

DISCOVERY OF THREE ANCIENT SITES: KASAREIA, LYDAI, KARYA.—Mr. J. T. BENT writes to the *Athenæum* (May 26) a letter in which he says: "During a cruise made this spring amongst the less-known bays and creeks of the south coast of Asia Minor the discovery of a large number of inscriptions enabled me to identify the sites of three towns mentioned by Ptolemy and Pliny, but which hitherto have not been known." Near Cape

Alopex, the most southern of the Karian peninsulas, about 2 hours from the ruins of the ancient Loryma and about two miles inland from a landlocked harbor, were extensive ruins. "Amongst these we unearthed four inscriptions, two of which identified the spot as called in ancient days KASAREIA, and a third showed us the site of an ancient temple of Apollo there."

Hearing of ruins on the north side of the extensive gulf of Makri, the ancient Telmessos, a few days' research "brought to light about thirty inscriptions, which identified the spot we had found as LYDAI of the ancients. Ptolemy, taking his towns in order, gives us in his list of Lykian cities Kalynda, Lydai, Karya, Daidala, Telmessos. Kalynda, of course, is known, and our discoveries at Lydai showed the geographer to be quite correct in his order. Lydai was built, like Kasareia, in a hollow basin surrounded by mountains, about two hours' walk from the seashore; on a depression which overlooks the sea stood several handsome *herōa*, and the ruins of the town showed it to have contained many superb buildings adorned with statues, the fragments of which we found scattered around.

From several of our inscriptions we learned interesting facts concerning the place. It formed one of a *decapolis* of Lykian cities, and the leading inhabitants of Lydai appear to have been also citizens of the other ten cities; many of the men of Lydai held high office in the Lykian nation, and one of them had been appointed Lykiarch, or chief magistrate, of the country. In the centre of the town we came across a spot which from an inscription we learnt was formerly known as the *Θείας Δαίον*, where numerous complimentary statues were erected by the *demos* to the worthies of the place. The town of Lydai, or rather the district which is referred to as the *Lydatis*, was apparently divided into *demes*, one of which was situated about a mile from the town, and was called by a thoroughly Lykian name, "the *deme* of Arymaxis;" it showed us traces of several handsome tombs and the foundations of a temple and other buildings. From the inscriptions we gathered that Apollo, Zeus, "the hunter-gods," the Dioskouroi, and Pan were worshipped at Lydai. Many of the citizens chose their wives from other cities, Pinara, Telmessos, *etc.*, which fact is recorded on their tombs; and, in the days of Vespasian, Sextus Marcus Priscus acted as ambassador here from the imperial court, and to him the citizens of Lydai put up a statue in the *Θείας Δαίον*. Two of the bases which had carried statues in this *agora* were erected in honor of two men, who are both styled, "the preserver and benefactor of our city of Lydai and of the commune of Kapdiapa of Lydai."

The third site is not identified with as much certainty. About five miles inland from the gulf of Makri, on the edge of a lake, were ruins which Mr. Bent considers those of Kapdiapa, which he identifies with the KARYA of Ptolemy.

KYPROS.

MONOLITHS.—Dr. F. H. H. GUILLEMARD and Mr. D. G. HOGARTH have written to the *Athenæum* (of April 14) concerning the discovery by them, in January last, of 27 limestone monoliths at and near a village called Anoyira, situated on the southern slopes of the Troōdos range. They are very similar to the two monoliths at Kuklia which are figured in Di Cesnola's *Cyprus*, and which have been regarded, very generally, as Phœnician, and by some as phallic. Dr. Guillemard (and his view is supported by Mr. Hogarth) concludes from the location of the stones, from their surroundings, and from accompanying cisterns, "millstones," etc. found on the sites, which he calls "properties" of these monoliths, that "these monoliths are neither Phœnician nor phallic but rather Roman and for purposes of agriculture (possibly olive-presses)." The monoliths were usually "placed at the corner or edge of a small platform constructed either of well-hewn masonry, or of rubble held together by coarse cement, such as it is customary to call Roman. . . In close proximity to the platform or its remains fragments of pottery are invariably to be found. No one of them is figured, concentric, ringed, or glazed. They are almost without exception of the very coarsest kind, and form portions of vessels of so large a size that they can have been used for no other purpose than storing wine or oil. . . We found no fragment that might not have been Roman."

Beside the monoliths discovered at Anoyira, they found one at Cape Greco and one near Kuklia, and heard that there were four others near Anoyira which they did not visit.

OLD PAPHOS (Palaipaphos = mod. Kuklia) (*cf.* pp. 88-9).—Mr. ERNEST A. GARDNER writes from Kuklia, March 10, that for the week past they have been excavating on the site of the great temple of Aphrodite and have found some valuable objects: (1) marble head of a boy (probably belonging to a statue of Eros), nearly life size, Greek sculpture of good style and in excellent preservation; (2) some small terracotta heads of good style; (3) a small marble head of archaic Greek style of about v cent.; (4) two fragments of marble statuettes of the best Greek work; (5) 67 inscriptions, some of great interest, especially an elegiac inscr. referring to the fortification of the town by King Nikokles, and other insers. referring to an official of the Library at Alexandria, and the founders of a shrine of Tyche at Paphos. Many of these inscriptions were built into a later wall and pavement, which were removed to find the ancient walls of the temple beneath.

The ancient tombs hitherto opened yield objects of little importance, as in Roman times they had been rifled and frequently used for a second interment.—*Athenæum*, April 7.

Mr. Gardner having returned to Athens the excavations at Paphos were placed in charge of Mr. D. G. HOGARTH, who writes that the site of the Temple of Aphrodite has now been almost entirely cleared; and that about forty more inscriptions have been found since the last report, bringing the whole number from the temple-site up to 115; among them is a fragment of a pedestal with Kypriote inscription. Two votive cones have appeared, and also what is probably the apex of one of the original subsidiary cones; and small terracotta figures of an early type have been dug out in various places from a uniform depth.

On opening two tombs belonging to a new set lying immediately below the temple on the slope towards the sea, very much better objects were found in them than in any of the others previously excavated. Tombs of widely different periods are mingled together, and several have been opened previously; but from the older examples some fine specimens of painted and typical Kypriote pottery have been brought to light, and from the later some exceptionally good Kypriote glass; one piece has a black outlined design, representing a dancing boy and an eagle, and two bottles are fashioned in *repoussé* work into the shape of a bunch of grapes. Some small heads and a stone dove have been found at the entrance to the tombs.

Mr. R. ELSEY SMITH, the architect of the expedition, writes that a good proportion of the walls are now laid bare. The majority of them belong to Tiberius's restoration of the temple. It seems originally to have been a quadrilateral court of about 200 ft. to each side, not quite square, but rhomboidal; and the temple proper stood in the centre of the eastern side. There are three parallel chambers, and a great stoa extended the whole length of the south side; besides, there are traces of other colonnades, whose extent is not yet fully determined. Very little architectural detail has turned up, and what there is is mostly Roman, parts of the columns of the stoa, but nothing like a complete entablature.—*Athenæum*, April 21.

Under date of April 7, Mr. HOGARTH writes to the *Athenæum* (May 5) that they have found the western limit of the later portion of the temple. This completes the southern stoa, the last two drums of which, the mosaic pavement, and the confining wall have been found intact. West of this, again, are the remains of a broader wall, which may be the outermost limit of the temple on that side, but its position and the character of its construction rather suggest Roman work.

The most interesting development is on the southwestern portion, near the great line of black blocks which are the most conspicuous objects upon the site. Foundations of a very old structure were found here, whose precise relation to the rest of the temple is not yet clear. From the northern end of the line returns a wall of great thickness, of which two or three courses are *in situ*, and from this again two other narrower, but similarly ancient walls, start northwards, and these walls they are now following out.

In the last fortnight have been found thirty-eight more inscriptions, bringing up the total number to 149, exclusive of some thirty previously above ground. All but two or three were unearthed in a great pit, which would appear to have been intentionally filled up at some period with stones and *débris* collected from the area of the northern court. Among the new inscriptions the most important are fragments of a Kypriote pedestal erected to a priest of Aphrodite; a large white marble mural tablet recording the reasons for, and ceremonies connected with, the erection of a statue to one Isidorus, whose pedestal was previously found; another palimpsest pedestal, upon which an inscription in honor of an emperor whose name is lost is cut by a grandson of Quintus Hortensius over a Ptolemaic dedication; some new *στράτηγοι τῆς νήσου*, and some new proconsuls; a pedestal erected to an *ἀρχισωματοφύλαξ* and Professor of Tactics in Alexandria; another to a *κινύραρχος*; another to a commissioner of mines; another fragment of a list of subscribers to the *Ἐλαιοχριστίον*, and so forth. An interesting find is a block of white marble, nearly 3 ft. high, and of triangular shape, upon whose lower part is cut a circle with four radiating rays—a representation of the sun. Among other things, the remains of a church or monastery were uncovered. [Let us hope that any remains of Christian archæology will receive attention at the hands of the excavators. * Ed.] Cf. letter of Mr. HOGARTH in *Classical Review*, May, 1888, pp. 155–57.

EUROPE.

GREECE.

A MONTHLY RECORD OF ARCHÆOLOGY.—We record with pleasure that the Greek Direction of Antiquities has made a happy innovation in starting a monthly record of antiquities, entitled *Ἀρχαιολογικὸν Δελτίον*. The first number is that of January 1888. It records all the additions to the Central Museum and other museums, and chronicles the results of excavations over the country from reports made either by Kabbadias himself or by other inspectors, such as Leonardos, Kastromenos, etc. The contents of No. 1 are as follows: (1) Archaic additions to the Central Museum (from Sikyon, Eleusis, Epidauros, from excavations near the outer Kerameikos, at Aigina, near Thebes): (2) Excavations (on the Akropolis, the outer Kerameikos, at the temple of the Kabeiroi near Thebes, the Peiraieus, "Dionysos"): (3) Additions to the Syllogos of the Peiraieus and discoveries at Barbasaine: (4) Movement in the Museums of Athens (Akropolis Museum; building of a second museum on the Akropolis; constructions at the Central Museum; establishment of an archæological service at the Central Museum; Catalogue of the Central Museum): (5) Miscellaneous intelligence.

THE FRENCH SCHOOL has suspended its work on the isle of Amorgos and resumed that undertaken at Mantinea. All the objects found at Amorgos are to be transported to Syra, where a central museum has been decreed, destined to contain everything archæological that can be found in the Kyklades, Sporades, or any of the Greek islands.—*Athenæum*, April 28.

NEW MUSEUM.—In the town of Tripolitza, in the Peloponnesos, a museum is to be built by private munificence, but under Government direction, for the purpose of containing the antiquities of Tegea, Mantinea, and other neighboring sites.—*Athenæum*, May 19.

RECENT DISCOVERIES.—There have been found: at KEPHISIA, a broken sarcophagus; near LAURION, in the sea, a female head; in AMORGOS, by the French School, a hoard of 53 Byzantine gold coins; in TANAGRA, ten beautiful terracottas, among which are an old nurse and a coquettish richly-dressed young woman.—*Berl. Phil. Woch.*, 1888, No. 18.

AIGINA.—A rectangular marble stele has been found with an archaic inscription, *Φόρος τεμένος Ἀθηνάας*. The field in which it was found evidently lies beside the road leading to the sanctuary of Athena.—*Ἀρχ. Δελτίον*, Feb.

AMORGOS.—RECENT DISCOVERIES.—The recent excavations of the French School at Amorgos had not for object the exploration of any particular site, but were directed to various points, as *Minoa* and its seaport, called now *Katapola*, the akropolis of *Arkesine*, and other localities. The island of Amorgos was in ancient times, owing to its nearness to the Asiatic continent, a centre of political and commercial life. Inhabited first by a population which is commonly thought to have been Karian, it has yielded a large number of materials illustrative of the ancient civilization which goes under the name of pre-Hellenic or Insular. To the Karian inhabitants succeeded the pure Hellenes of Naxos, to whom were added later emigrants and colonists from Samos, Miletos and Krete. Its three cities, Aigile, Minoa, and Arkesine, are proved by inscriptions to have been in a flourishing state even up to times comparatively recent. To the epigraphic and archæologic discoveries which have taken place so far, and with which are connected the names of Ross, Weil, Dubois, Dümmler, and Halbherr, the recent excavations of the French School have made considerable additions; and there is no doubt that if, when the excavations are resumed next month, they are conducted on a regular plan, Amorgos will be distinguished amongst all the islands of the *Ægean* for the number and importance of its contributions concerning the state of ancient Greek and pre-Hellenic civilization.

The epigraphic monuments now discovered at MINOA consist of six pedestals with dedicatory inscriptions to Hermes, to Demeter and Kore, to Eileithyia, etc.; three decrees; and the inscription of an artist called Theophilos, on a fragment of a statue. Other like pedestals were found in Arkesine, and one in Katapola. At KATAPOLA, and in the locality called *Kato-Akro-*

teri, were found sepulchral stelæ of the Byzantine epoch, and a dozen other titles, some of Roman times. On one we read the name of the sculptor Protogenes. From the akropolis of ARKESINE come two archaic sepulchral inscriptions, one Christian inscription, five or six other titles, and many fragments of decrees.

Amongst the *sculptures* we may notice three heads discovered at Minoa, one being, as it would seem, that of a Roman emperor, another of a woman with necklace and earrings, the third of a man with his brows crowned with ivy. The last is supposed to represent the poet Aristogenes, whose name is read as the author of a hymn to the Muses and Apollo upon a pedestal found hard by. From the same city come two slabs of a sarcophagus with basreliefs. On one is seen a youth seated on a wild courser, with his *himation* open; on one side stands an altar with a serpent twisted round it; in front of the altar are a woman erect, attired as a priestess, and two suppliants; further on is seen a child leading a lamb destined for sacrifice. The other relief represents a youth standing, holding in his right hand a horse by the bit, around the feet of which is also coiled a serpent. The youth wears a chlamys, which falls behind him. Amongst the fragmentary pedestals of statues one has a dedication to Hermes and Herakles. In Arkesine were found an altar which seems to belong to the goddess Hera, and also three busts of statues—one of a woman and two of men; and further, several handles and covers of vases in terracotta, various weights and plummets of terracotta, one of lead, and two figurini of Satyrs and Seilenoi. A relief of Christian times, representing a scene of wild-boars pursued by dogs, was found in the port of Minoa. Many Byzantine coins were found in the city of Arkesine. From the epigraphic remains now discovered much important topographic information can be gleaned, especially concerning Minoa, and also details connected with the history of ancient worship, since there are mentioned as belonging to this city the temple of Hera, the temples of Serapis, a gymnasium, a theatre, and a stadium. Mention is also found of worship paid in Amorgos to Athena Itonia. All these objects from Amorgos have now been placed in the central Kyklades Museum at Syra.—*Athenæum*, May 12.

ATHENS.—EXCAVATIONS ON THE AKROPOLIS.—At a depth of fourteen metres, near the point touching the angle of the Museum, have been found traces and fragments of walls belonging to houses of a very remote epoch in prehistoric times, dating perhaps some thousand years before Christ. To the same period belong various objects found there at the same time, including many implements in bronze, such as two-edged axes and swords. On the same site have also been found some terracotta vases of the so-called Mykenai epoch, a small terracotta vase, and the base of a vase in the form of a kylix, on which is represented in relief Herakles slaying the hydra.

This last discovery, coupled with that of the fragment of a statue of Herakles of poros stone, found on the same site a short time ago, is of especial topographical importance, as it may lead to the conclusion that there existed on the spot a temple dedicated to that hero.—*Athenæum*, April 14.

The objects discovered during the recent excavations on the Akropolis have become so numerous that the existing museum near the Parthenon is not able to contain them all. Additional accommodation will, therefore, be provided in the rear of the present building. The lowest strata in which the objects recently described have been found consist in great part of fragments of poros stone, amongst which several architectural pieces have been observed. Amongst the marble fragments found strewn the ground was a large foot of the statue of a man. Of the terracottas special mention should be made of some fragments of painted vases with potters' names. One of these bears a dedicatory inscription to Athena Hygieia, and the name of a potter called Kallis.—*Athenæum*, May 5.

On April 18th another important discovery was made on the Akropolis, dating from the period before marble was used for sculpture at Athens. This was another head of a bearded man in poros stone, of more than natural size, and resembling in every particular of color that already discovered, and described in the *Athenæum*. It would seem that they both belonged to the same group.—*Athenæum*, May 12.

EXCAVATIONS AT THE TEMPLE OF ZEUS OLYMPIOS.—The Athenian Archæological Society is busy levelling the ground along the northern side of the *peribolos* of the Temple of Zeus Olympios, near which will run the new promenade. In these excavations many foundations of mediæval houses and tombs have been found, constructed for the most part of old materials which formed part of the great Olympieion. Thus various architectonic fragments of the old temple have come to light, with many portions of statues and reliefs, and several inscriptions. Amongst the latter are the pedestals of two statues of Hadrian. One of these inscriptions bears the name of Statius Quadratus, consul A. D. 142; the other was dedicated by the inhabitants of the city of Apollonia, a seaport of Kyrene, in Libya.—*Athenæum*, April 28.

SCULPTURES IN THE AKROPOLIS MUSEUM.—We take from the London *Builder* of March 31 the following description of the fragments of a figure (usually termed a Triton) in poros stone (*cf.* p. 93 of *JOURNAL*): "All the fragments so far found are now collected together in a case in the first room of the Akropolis Museum. The head of the figure is well preserved, and, from its weird coloring, presents a very striking appearance. It is considerably over life-size, and well preserved but for the loss of the nose and part of the upper lip. The hair, arranged stiffly round the head, is of a vivid, dark blue, the pupils of the eyes are emerald green, the mous-

tache and short formal beard blue. The spirals of the tail, of which many fragments remain, are also brilliantly colored in three bands, one red, one blue, the third decorated with curved lines in blue."

The same number of the *Builder* contains an enumeration of the more important archaic sculptures placed in the Akropolis Museum, including a description of the figure of Athena conjectured to belong to the pediment sculptures of the older Athena temple: "There are traces of red color on the hair, and the holes in the head show that a metal diadem has fallen away. The face is mild, and even tender in expression; the eyes are cast down with a look of benignant protection." "Omitting monuments of less general interest, the fourth room contains a very interesting set of terracottas, delicately colored in blue, red and white; in one of these Athena is represented in a chariot, wearing an *egis*, most beautifully colored. Several reproduce the type of the figure *mounting a chariot*, which Pheidias has turned to such good account in the Parthenon frieze."

ADDITIONS TO THE CENTRAL MUSEUM.—During the week March 25–31 the Central Museum received the following: six fragmentary and ten entire painted kylikes; eight kantharoi; two seated female statuettes; one standing do.; four seated male statuettes; one standing do.; two statuettes of boys.—*Berl. phil. Woch.*, 1888, No. 18.

Among recent additions are: six lion-heads from the tholos of Polykleitos at Epidauros; a large archaic amphora, adorned on the body and neck with geometric figures and zones of architectonic ornament; fourteen white lekythoi, and a number of others partly colored.—*Ἀρχ. Δελτίον*.

Four tombs of the Roman period have been discovered at Athens during some work connected with the reservoir. One of them contained an alabastron, a small painted vase, and several fragments of earthenware; while in another was found a skeleton, the head of which is in a wonderful state of preservation, so as to show the beard and the hair cut short in front and left long behind. The skeleton has been consigned to Dr. Klôn Stephanos, Director of the Anthropological Museum in the University.—*Athenæum*, May 19.

AMERICAN SCHOOL.—The following is a list of some of the subjects treated in papers read by the students of the American School of Classical Studies at Athens, at the meeting of the School during the season of 1887–88. 1. *The Development of the Ionic Capital*. 2. *The Centaur in Literature and in Art*. 3. *Icaria*. 4. *Ballots preserved in the Polytechnikon, and their use*. 5. *The Sphinx on Coins*. 6. *Inscriptions recently discovered on the Akropolis*. 7. *The relations of the freedman to his former master in Greece*. 8. *Some peculiarities of modern Greek*. 9. *Lykosura and the Despoinei*. 10. *Recent discoveries in the Amphiarakon of Oropos*. 11. *Types of Apollo and of Dionysos*. 12. *Existing remains at Marathon*. 13. *Ostracism and*

the *Xanthippos* potsherd. 14. *On the Measurement of Statues.* 15. *Modern Greek Rhythm.* 16. *The Aristion Stele compared with the Ikarian.*

PROF. MILCHHÖFER'S EXPLORATION OF ATTIKA.—At a meeting of the Berlin Academy of Sciences (Dec. 15, 1887) Professor A. Milchhöfer read a paper on his researches into the topography and archæology of Attika, entitled *Vorläufiger Bericht über Forschungen in Attika*. These researches, as already stated (JOURNAL, III, 438-39), were conducted with a view of a map of ancient Attika. Professor Milchhöfer has succeeded in identifying a large number of sites, through inscriptions or sculptures. The large sites, like Athens, Peiræus, Eleusis, Amphiaræon near Oropos, are excluded. About 200 new inscriptions were copied: these were mostly sepulchral, but there were 33 dedicatory inscriptions, 16 on boundary-stones, and 10 of mixed character, mostly decrees: five were pre-Eukleidian. The sculptures found at Lamptrai and Kropæia were of considerable interest. Traces were found of old roads, water-conduits, mines, sanctuaries, cemeteries, forts, frontier-posts, etc.—*Berl. phil. Woch.*, 1888, No. 18.

DELLOS.—*Inscription of the Sculptor Teletimos.*—M. HOMOLLE, at a meeting (April 25) of the *Soc. nat. d. Antiq.*, presented and commented on an inscription found at Delos: it is a decree concerning the works executed by an artist called Teletimos in the temple of Apollon. Among these works is mentioned a statue of Stratonike, daughter of Demetrios Poliorketes and wife of Seleukos I, King of Syria.—*Cour de l'Art*, 1888, No. 19.

DELPHI.—The head of a bearded man in marble, of natural size and of a good period, has been found by a cultivator in digging his ground. The block has been brought to Athens.—*Athenæum*, May 19.

KARDITZA (near).—A female mask of terracotta, some copper coins and two small glass vases have been found.—*Αρχ. Δελτίον*, Feb.

LARISSA.—*Archaic stele.*—In the last number of the *Bull. de Corr. Hellenique* (March, 1888) M. Fougères publishes an archaic stele at Larissa (cf. *Mith. Athen.*, 1887, p. 73) which is reproduced, also, on pl. VI. It is very interesting for the history of the art of Thessaly. It represents a Thessalian youth, slightly over life-size, standing in profile. He holds in his left hand an apple which he raises to his mouth, and on his right arm rests a rabbit. He wears the petasos and boots (?), and painting was undoubtedly used to fill out details. This fact, the lowness of the relief, the almond eyes, the smile, and the stiffness of the limbs, indicate the early fifth century.

LAURION.—*Inscription of Atotas.*—The following metrical sepulchral inscription has been found in the mines of Laurion: Ἀτώτας μεταλλεὺς | Πόντου ἀπ' Εὐξείνου Παφλαγῶν μεγάλθυμος Ἀτώτας | ἥς γαίης τηλοῦ σώμ' ἀνέπανσε πόνων, | Τέχνην δ' οὔτις ἔριξε· Πυλαμίνεος δ' ἀπὸ ριζῆς | εἰμ', ὅς Ἀχιλλῆος χειρὶ δαμείεθ' ἔθανεν. "Come from the Euxine, the Paphlagonian Atôtas, liberal hearted, has, far from his country, given rest to his body from all sufferings. In

skill none could rival me; and I am of the race of Pylaimenes, who died vanquished by the hand of Achilleus." Atôtas was probably a skilled metal-founder. The inscription is attributed to the second half of the fourth century.—*Bull. Corr. Hellén.*, March, 1888.

OROPUS.—In the double-aisled portico of Doric style and Hellenic period found in the excavations of the Athenian Archæological Society, and now completely laid bare, an inscription ran in a long line upon the frieze in such a way that each metope was occupied by one letter. The number of blocks found is so small that it has been impossible to reconstruct the inscription.—*Athenæum*, May 5.

PEIRÆIUS.—*Recent Discoveries.*—Four sepulchral stelai with inscriptions, two of them adorned with reliefs; another sepulchral relief; a relief representing Kybele. A tomb has been opened in which were the remains of 14 bodies, beside a few vases.—*Arch. Δελτίον*, Feb.

PHARSALA.—*Basrelief.*—M. Fougères recently found at Pharsala, in the vestibule of the mosque called Yéni-Djami, a basrelief of white marble—belonging to the class of votive reliefs placed against the walls of temples. It bears the inscription: Ἑστία. Σύμμαχος.—[Ὁ δαίμα Θ]ρασύδαίος ἀνέθηκε. The first two words do not belong to the dedication, but designate two of the figures in the relief that are of larger size than the rest, Hestia, the Home-goddess, seated and spinning, while before her stands a youth, Symmachos, near his horse, who, being divinized as a hero or protecting genius, is the object of local cult. Approaching this group in attitudes of adoration are five figures, three male, followed by two female. This work belongs to the first half of the fourth century, and is evidently inspired by the Attic School.—*Bull. Corr. Hellén.*, March, 1888.

TANAGRA.—At the expense of the Ministry of Public Instruction, excavations have begun at Tanagra. There has been found the tomb of a child, within which were thirteen statuettes of the same subject, representing a nude man pressing a cock to his bosom with his left hand. Many terracotta vases were found in the same place, of diverse forms, and for the most part ornamented with *anthemeia*. They consist chiefly of *lekythoi*, *kylikes*, and *kantharoi*, and amongst them is a black *pyxis*. Of the statuettes found at the same time, one, a fragment about half a metre in height, represents a woman standing; another, an old woman with a babe in her arms; another, a standing youth clad in a chiton, with, in his right hand, a purse, and hanging from his left arm a chlamys. Others represent women seated, two naked children seated, a naked child squatting on his heels, three men seated and one standing.—*Athenæum*, March 31, May 5.

Over forty tombs have been opened, in which were found fifty vases, five *pinakes*, ten archaic statuettes, and a few figures of animals. More detailed information shows that there were found: two *kantharoi*, one hav-

ing the figures of two men, one on each side, and the other with ornamented handles in the form of a satyr-head; a large *aryballos* with a goose and a duck represented; four large *kylikes* with colored ornaments; four others having each four handles and archaic ornamentation in red; ten smaller *kylikes*, ornamented with flowers; four *pyxides*; several *lekythoi* with ornaments in white, red, and black; and other smaller or less remarkable objects of the same kind. Amongst the figurini and statuettes there are three representing women in the act of working, one a lady at her toilette, six of women seated, several archaic statuettes, a figurine of a seated satyr painted black and red, some statuettes of horsemen and of animals; lastly a *kylix* with figures representing a *kentauiromachia*; a strange vase, consisting of a *kantharos* set upon a *kylix*, and also an inscribed *kylix*.—*Athenæum*, May 12; 'Αρχ. Δελτίον, Feb.

TURNABON.—In digging a trench near Turnabon a collection of 810 Byzantine coins was found.—'Αρχ. Δελτίον, Feb. 1888.

KRETE.

The French School at Athens has despatched M. Doublet to Kanea in order to undertake an archæological exploration of the eastern provinces of Kreta.—*Athenæum*, May 12.

KNOSSOS.—A sepulchral inscription in verse has been discovered, and is attributed to the end of the second or to the first century B. C. It belongs to a person named Thrasy machos, son of Leontios, who distinguished himself by an extraordinary feat of arms. The metre is elegiac, and the execution not bad. Its epigraphic importance consists in its containing the name of a Kretan mountain hitherto unknown (Ἐδαίων), and of a *demotikon* also new to us (Ἐπραῖον).—*Athenæum*, May 19.

ITALY.

PREHISTORIC AND CLASSICAL ANTIQUITIES.

S. ANGELO IN FORMIS.—*Archaic Latin inscription*.—An interesting epigraphic discovery has been made on this site, where the famous temple of Diana Tifatina was situated. In a wall, built of small pieces of tufaceous stone, was found an inscription on calcareous stone: under the letters was a round hole closed with an ancient piece of lead. The inscription, in archaic characters, reads: SER · FOLVIVS · Q · F · FLACCVS · COS · MVRV · LOCAVIT | DE · MANVBIES. The well-known personage (*C. I. L.*, i, p. 438; *Ephem. Epigr.*, i, 154), Servius Fulvius Flaccus, mentioned in this inscription, was consul in 619 U. C., or 135 B. C., to which year the inscription belongs. It is the oldest yet found in Campania. He was probably the son of the Q. Fulvius Q. f. who was consul in 575 U. C. The inscription relates

that the wall was built with the spoils of a war, which must be the Illyrian war in which Servius Fulvius Flaccus fought the Vardei or Ardei. The wall probably belongs to the temple of Diana.—*Not. d. Scavi*, 1888, p. 142.

BOLOGNA.—*Painted vases from the Arnoaldi property.*—A description has but recently been published, by Professor E. Brizio, of the painted vases found in this part of the necropolis of Bologna between 1884 and 1886. A krater from a late tomb, whose stele was published by Gozzadini (*Atti R. Accad. dei Lincei*, 1884-85, t. II) is remarkable for its elaborate composition from the Dionysiac cycle, containing nearly twenty figures, full of motion and drawn with a free hand, distributed on two or even three planes, as in many Apulian vases. All the flesh-parts are colored white—this being carried further than in any other vase found at Bologna. It is probably to be assigned to the beginning of the third century B. C. Among other vases, are: (1) red-figured amphora with Theseus and the Minotaur; an athlete and his trainer; (2) fine red-figured skyphos with two scenes, in one of which a youth flees from a man who offers him a hare, while in the other a man flees from a youth; (3) red-figured krater with a race between two young horsemen, the goal being a column; (4) large krater, with the Nereids bearing the arms of Achilleus; the beautiful figure of the hero is seated, receiving the *parazonē* from one of the female figures; (5) voluted krater, having the parting drinking-scene, in which a girl, with a lowered oinochoe in her left, offers with her right a patera to a youth with breast-plate, shield and lance, while two bearded men look on (obscure scene on reverse); (6) three kylikes, bearing scenes from the palaistra; (7) skyphos with two banquet-scenes. These vases belong to the finds of 1884. In 1886 were found the following: (8) kelebe with Hermes, accompanied by Aphrodite, pursuing a girl; a musical scene: (9) krater with a combat of Greeks and Amazons: (10) "olla"; Zeus and Hera seated and drinking, waited on by Nike; three youths: (11) krater; a female figure driving two winged horses; three draped figures: (12) krater with well-drawn red figures of two men, each standing beside a horse which he is preparing to mount—a unique *genre* scene: (13) krater, on whose front rises a two-storied *thymele* upon which leaps a Bacchante followed by another, both bearing cymbals, while the youthful Dionysos and three satyrs observe the scene; on the other side, four youths in a drinking-scene: (14) amphora with well-drawn red figures, representing, on both sides, a combat of Greeks and Amazons—the first vase from Bologna in which such large figures of Amazons are arranged on two planes: (15-17) a kylix, a skyphos, and a kantharos.—*Not. d. Scavi*, 1888, pp. 42-54.

CAPUA.—*Antiquities found at S. Maria Capua Vetere.*—In the court of the new military quarters have come to light some remains of ancient buildings and objects of marble and terracotta. Among these are 1. *Marbles*:

(1) torso; (2) parts of three nude *putti*; (3) fragments of channelled and unchannelled columns, capitals and bases; (4) many fragments of marble decoration; II. *Terracottas*: (1) bust of a Dioskouroi; (2) female statuette; (3) archaic female seated statuette; (4) statuette of a boy; (5) painted antefixa; etc.—*Not. d. Scavi*, 1888, p. 64.

CORNETO = TARQUINII.—*Necropolis*.—Signor Rispoli, in turning up the ground on his property 600 met. outside the Porta Tarquinia, came across many objects from tombs disturbed by previous excavations: fragments of painted vases of local manufacture; plain Aretine wares; early imperial lamps; *balsamaria* of transparent green glass; two cippi of calcareous stone, both with Latin inscriptions. Finally, two inviolate tombs were found, of that type in which the tomb consists of a square hole cut in the rock, containing a painted vase with the burned bones. One tomb contained an Attic amphora with accurately drawn figures in the severe style: it was decorated on both sides with a bearded mask crowned with violet and black leaves. Five silver fibulae and two gold bosses were inside the amphora. The other tomb contained an Attic amphora with black figures in a rather careless style: on one side is a woman between two hoplites; on the other are, a hoplite, and an archer in Scythian costume, between two old men leaning on staffs.—*Not. d. Scavi*, 1888, pp. 57, 58.

ESTE.—*Antiquities discovered in the Fondo Baratela*.—Professor G. Ghirardini publishes, in the January number of the *Notizie degli Scavi* (1888, pp. 3–42; pls. I–VI) the first part of a long memoir on a very interesting series of antiquities found near Este: he considers this discovery to be “one of the most important and strange ever made in Upper Italy.” Our knowledge of the pre-Roman culture of this region, commencing with the first iron age, has been hitherto derived almost exclusively from the nekropolis. But the antiquities described below have no relation to a nekropolis, but are of a religious and votive character, and belong also to an advanced period in this early civilization. In 1880, three bronze figurines were found on the property of Luigi Baratela, about two kilom. east of Este, and from that time excavations have been conducted by the owner, which, though very fruitful, were unfortunately not at all scientific or regular. Fragments of a ruined wall were found, about 12 met. long, built of irregular masses of stone. Near it, in the same field and in a small area at a medium depth of 1.50 met., all the antiquities were found, between 1881 and 1886. North of the wall many architectural fragments were found; also a circular well, 8 met. deep. Among the fragments are to be noticed a Doric capital and a section of a Doric shaft, to which the capital probably belonged. There is, also, another Doric shaft, part of a pilaster, a base, piece of an architrave, some terracotta decoration, bricks which originally formed a column, antefixa, etc. From the deplorable careless-

ness of the ignorant excavators, no pains were taken to study the remains of this building, and it is now impossible to do more than conjecture that it was an important temple with a portico. The same difficulty arises in regard to the antiquities, as no regard was had to their position, or relation, and no care exercised in preserving the fragile bronze plates that form perhaps the most important part of the discovery.

Professor Ghirardini has divided the large Baratela collection, now in the possession of the Museum at Este, into four principal classes. I. Euganean Inscriptions. II. Figured antiquities. III. Ornamental objects and utensils. IV. Coins; each class being subdivided and arranged in chronological order. The writer begins by giving merely a detailed description of the objects, reserving his deductions and conclusions for the end. The present part of the memoir deals only with the first class, mentioned above, the *Euganean Inscriptions*.

The inscribed monuments are of three kinds: *bronze tablets*; *bronze nails*; *stone pedestals for bronze statuettes*. (1) *Bronze tablets*. These are divided into small squares by horizontal and parallel lines, in order to secure the regularity of the inscription, while in some these lines are intersected by vertical lines forming little squares, each containing a letter: the letters are generally made to touch these vertical lines. The writing is of four kinds: (A) Real inscriptions composed of words and sentences; (B) Series of letters arranged in alphabetical order; (C) Groups, each formed usually of two consonants, arranged in succession with a certain uniformity; (D) Repetitions of the same letters on each line, *i.e.*—*o, e, k, a*. On tablet No. 1 these four kinds are arranged as follows: (a) inscription (l. 6); (b) alphabet (l. 5, 11); (c) groups of letters (l. 1–4); (d) letters repeated (l. 7–10). The inscriptions and the alphabets are evidently the most important parts. They afford to Professor Ghirardini extremely interesting material for the study of the Euganean alphabet, as there are many new forms and variations. In one of the plates the first four lines show a singular *boustrophedon* arrangement, the letters in every other line being not only reversed but turned upside down. Another has, on the fourth line, the Latin words DEDIT LIBENS MERITO in letters of the second century B. C. This formula proves the votive character of the entire series. (2) *Bronze nails*. These singular objects, of which there are about 250, are far rarer than the tablets, and the correspondence of their inscriptions with those of the former class show that they, also, are votive; *i.e.*, they were all *ex-votos*. Some have real consecutive inscriptions, but the greater part only letters repeated, and signs whose meaning is doubtful. These nails are usually cast; a few only are beaten out. They are in the shape of a long, narrow quadrilateral pyramid, which, at two-thirds of its length, becomes a slender cone ending in a point. The head is flattened out, palet-like, and has

one, two, or even three, holes for rings. They were evidently intended not to be driven. The inscriptions are confined to the pyramidal part, and it is evident that the series of letters were generally used merely for decorative purposes. (3) *Stone pedestals*. The votive character of the series of stone pedestals is even clearer. Their inscriptions, analogous to and in part identical with those of the bronzes, refer to votive bronze statues. From one example that is almost entire, it is seen that these pedestals are pilasters in the shape of a quadrangular truncated pyramid, resting on a simple base and crowned by a quasi-Doric capital (generally an abacus, a torus moulding and a fillet) on whose abacus or plinth the statuette was placed. It is proved that the statuettes on several of these were equestrian, the horse's hind-feet being attached by two bronze clamps.

MOGLIO (prov. of Bologna).—*A tomb of the Villanova type*.—A tomb of the Villanova type, probably of the last Arnoaldi period, has been discovered accidentally. At a distance of about 600 met., an Etruscan tomb had been found in 1872. This fact is important, as it would indicate the presence of two separate nekropoleis—one Italic, the other Etruscan. The objects found in the Villanova tomb are earthen vessels, bronzes, utensils in glass-paste and in amber. There were two examples each of several kinds of brooches (fibulae).—*Not. d. Scavi*, 1888, p. 54.

PONTINE REGION.—*Ancient system of drainage*.—In that part of Latium which crosses the Via Appia, and which is at the present day the desert of Velletri, the Romans found and subdued twenty small independent tribes, confederate and essentially agricultural; hardy, proud, and courageous. This rude population had redeemed, foot by foot, the hills, valleys, and plains which they occupied. M. RENÉ DE LA BLANCHÈRE, during his sojourn at the French School of Rome, applied himself to seek for the remaining traces of the system of drainage by which this was accomplished. He found a complete system of subterranean galleries, ramifying into each other, draining all the sub-soil of the region, in a way to regulate the level of the waters and render possible the rapid carrying off of the overflow from the large natural reservoirs. At intervals were dug openings to the surface to prevent the obstruction of the canals: these openings may be traced, and some of them might even be put into working order. The openings indicating to M. de la Blanchère the existence and direction of the entire cunicular network, he visited more than a hundred of these galleries, narrow and solid, all made after the same model by the use of a simple and rude tool, a specimen of which is to be seen in the Kircher Museum at Rome. This work, colossal by its extent and its difficulties, implies the greatest patience, aptitude, and instinct, and shows extreme economy and simplicity of means.

M. de la Blanchère has written a book giving the results of these explorations, and thus indicates the conditions under which these works were

constructed. Excess of wet had deteriorated the soil: the ancient craters of the heights had become lakes, and from these natural reservoirs the water slowly descended by infiltration, remaining on the brow of the hills, at the bottom of the valleys, above all, in the plains, in the bosom of the tufa which constitutes in great part the superficial soil. To remedy this, they first attacked the lakes, and in the sides of the craters they pierced large openings to increase the flow of the waters or to regulate the level of the waters held in reserve. They then cut in the tufa the narrow galleries forming the cunicular network of drains. In his examination of the work M. de la B. found an exact knowledge of levels, a utilization of slopes, and an appreciation of their least modifications that show these people to have been "burrowers" without equal, unconscious engineers, with whom natural aptitude adequately took the place of science.

It is a fact worthy of remark that the Roman writers on agriculture, Varro, Cato, *etc.*, are completely silent concerning cunicular drainage: a silence explicable only on the ground that this system was not in use, either at that time or for a long time previous. At the epoch of Varro and Cato, the *latifundium* had invaded everything, a system which resulted in reducing the Pontine Region to a desert.—Sitting of the *Académie des Inscriptions*, March 28, reported in the *Paris Temps*.

ROMA.—*Arch of Augustus*.—In the course of some recent excavations in the forum, made under the direction of Prof. Richter, of Berlin, with a view to elucidate more fully the plan and mode of construction of the Temple of Julius, the discovery of a solid well-built travertine foundation of a pier abutting on the south side of that temple suggested the hope that he had come upon a trace of the Arch of Augustus, which is known (from a *scholium* to the *Æneid* published by Cardinal Mai) to have been built *iuxta ædem divi Iuli*. Further excavations having been made, the foundations of other piers were discovered, and it is now apparent that the arch was one with three passages, like those of Severus and Constantine, spanning the road between the temples of Caesar and Castor. Each of the two piers flanking the middle passage covers an area of 9 ft. by 15 ft., the width of the passage being about 14 ft. The outer piers are narrower, about 5 ft. wide. In this respect the arch differs in its proportions from the later Roman arches, but resembles that of Orange.—*Athenæum*, April 28.

The inscription belonging to it was formerly found [in 1540-50; see MIDDLETON, *Anc. Rome*, p. 207] on this site without any information being at that time obtained in regard to the position and form of the arch. It was erected by Augustus, according to some, in memory of Roman standards recovered from the Parthians in 23 B. C.; according to others, in honor of his victory at Actium in 30 B. C.—*Berl. phil. Woch.*, 1888, No. 17.

Column of Phokas.—Mr. F. M. NICHOLS communicated to the German

Institute of Roma (April 13) his discovery that the monument of Phokas, which since the discovery of its inscribed pedestal in 1813 has been universally assumed to have been erected by the Exarch Smaragdus in the year 608 with the aid of a column taken from some older building, was not erected at that period, but was only inscribed by Smaragdus to Phokas, the inscription being incised upon a surface from which an older dedication had been erased. It may be safely assumed that the gilded statue mentioned in the inscription was also borrowed from the older monument.—*Athenæum*, April 28.

Basreliefs.—In the Subura (Via Cavour) two fragments of marble sculpture have come to light. The first is the remnant of the front of a sarcophagus with two niches, each filled with a male figure: it is much damaged. The other fragment belongs to a relief representing Achilles dragging Hektor's body around the walls of Troy. There remain the rear part of the quadriga, to which Hektor's body is attached, and parts of figures behind, including two warriors and a woman.—*Not. d. Scavi*, 1888, p. 59.

Via Flaminia.—Among constructions of the usual sepulchral type, several interesting objects have been found on the left side of the Via Flaminia. The most important is a marble cinerary urn of the greatest beauty. It has a hemispherical striated body with a conical cover, the whole being covered with beautiful decorative carving. A little further toward the city, within a compact mass of wall, a sarcophagus of Carrara marble was found, with bust, 2 figures at the angles, and hippocriphs on the ends. It was protected by stamped bricks of the year 123.—*Not. d. Scavi*, 1888, p. 61.

Ruvo.—*Vase*.—A vase (*aryballos*) lately found here is noticed as especially interesting by Cav. G. Jatta because it bears the figure of a youthful herald in the act of delivering his message. He has long travelling trousers, the chlamys attached on his chest, with the military *pileus* in his lowered right hand as if saluting, while in his extended left he holds the caduceus. It is thought that the only known representation of a herald in vase-painting, before this discovery, was that on a krater of the Kircherian Museum (WINCKELMANN, *Mon. ined.*, I, 35, 72).—*Not. d. Scavi*, 1888, p. 144.

SORRENTO=SURRENTUM.—In a garden belonging to Signor de Martino, there was brought to light a beautiful marble statue of life size, fractured in some parts, and wanting a forearm. It apparently represents a pugilist, judging from the *cæstus* which is wound around the hand and wrist up to the elbow: the head has a crown of olive leaves. It is of Greek workmanship and the first statue discovered at Sorrento. By the side of it was found a much smaller statue of the god Terminus. On the base are inscribed some Greek words. According to later information, the arm of this statue had been previously found.—*Athenæum*, April 14, May 12.

CHRISTIAN ANTIQUITIES OF ITALY.

CIVITAVECCHIA.—*Christian inscriptions.* Under the ancient fortifications north of the Palazzo Guglielmi were found two inscriptions that belong to the ancient Christian cemetery of *Centum Cellae*. Both belong to the sixth century (as do all those previously found): one of them is dated October, 545 A. D.; the other August, 557 A. D.—*Not. d. Scavi*, 1888, pp. 130–31.

ROMA.—*Catacomb of Priscilla.*—The following is quoted from a Report on the very important excavations in the cemetery of Priscilla, published by Comm. de Rossi in the *Not. degli Scavi* (1888, pp. 139–40): "A hypogeum of very ancient form, different from the ordinary type of cemeterial Christian excavation, has been entirely unearthed in the central and perhaps primitive nucleus of the cemetery of Priscilla, at the third mile on the *Via Salaria nova*. It consists of a single large ambulacrum or cryptoporticus in *gamma* (as the ancients term it), that is, turned at right angles with its own staircase. The places for tombs are all large arcosolia or niches for sarcophagi, the fragments of which were mixed with the earth and ruins that filled the hypogeum: there was not a single *loculus* of the usual cemeterial pattern in the walls, which, together with the cavities of the niches, were originally covered with a simple white stucco with red lines forming square sections containing a few figures of animals: afterwards the whole was covered with marble slabs and mosaics. Of these only the impress remains, as the hypogeum has been barbarously ruined and despoiled of its ornaments, we know not when. One single Greek inscription, partly covered by later constructions, has remained in its place, on the floor in front of one of the arcosolia: it contains the Christian symbols of the anchor and the monogram $\chi\rho$. This epitaph belongs to a sepulchre added to the primitive ones.

At the end of the ambulacrum, where it was newly adorned throughout with marbles and mosaics, a passage was opened into a large subterranean hall, nearly eight met. long by about four wide: what was originally a *piscina limaria* was turned into a splendid cemeterial crypt. Its barrel-vault was then adorned with mosaics, and in its centre was opened a square *lucernarium*; the walls received a marble revetment: only the impress remains of both mosaics and marbles. The outlines of the tomb, however, are visible in the place of honor at the end of the crypt; and, among the rubbish that filled it, have been found four broken sections of beautiful columns, spirally channelled, of Numidian marble (*giallo antico*). From four fragments has been restored the following inscription, which belonged to a monument above ground and not to the catacomb:

*I. miniCiO · L · F · GAL · NATALI · IIII · VIR · viarum | curaNDARVM
 quæstORI · PROVINC . . . | tr. pl. PRAETORI · leg. aug. pr. pr.*

proviNC · Africæ | leg. imp. caes. nervæ traiani aug. leG · V. . . | donis do-
nato ab. imp. traiano aug. geRM · DAClco | corona vallari navali aurea
hASTIS · PVRI III | vexillis III leg. imp. traiani aug. PR · PR · LEG · III |
aug. cos. cur. alvei tiberis et riPArum | et cloacarum urbis . . . Lucius
Minucius Natalis was consul in 107 A. D. In a broken inscription, cut on
the lid of his sarcophagus found in the hypogeum, a personage of illustri-
ous family is named: the letters are of the *paint-brush* type, so called
because they imitate the letters painted in red on amphoræ and walls:

ACILIO GLABRIONI
FILIO

S

[The names of two other *Acilii* are read on
two Greek epitaphs on slabs found in loculi
of the cemetery contiguous to the hypo-
geum]. The letters of the inscription of

Acilius Glabrio appear to be of the time of the Antonines, and are more
suited to a descendant of the Consul Acilius Glabrio, put to death under
Domitian in 95 A. D., than to the consul himself.

A Roman Artist.—In a letter addressed to the *Courrier de l'Art* (1888,
No. 15) Professor C. de Fabriczy gives some interesting information about
an artist mentioned only as a sculptor and engraver in Vasari and in Mo-
relli's *Anonimo*. He was the son of the sculptor Isaia di Pippo, of Pisa
(see E. MÜNTZ, *Les Arts à la cour des Papes*, I, pp. 255, 277, 285 *sqq.*), born
between 1470 and 1475 in Roma, is mentioned as one of the best sculptors
of the city, in 1506, was the author of the monument of Gian Galeazzo
Visconti in the Certosa at Pavia, and that of Pier-Francesco Trecchi at S.
Agata in Cremona, was a famous medallist (three of his medals have recently
been identified by Valton and Venturi) and, finally, was, during the last
years of his life, chief architect of the famous sanctuary of Santa Maria di
Loreto, where he went between 1506 and 1508. He died young in 1512,
although the date of his death was until now erroneously thought to be
1520. He possessed a valuable collection of antiques—gems and jewels,
coins, medals, and cameos—which he left to the Hospital at Recanati.

VENEZIA—Early Painters.—Sig. Michele Caffi has published, in the last
number of the *Archivio Veneto* (fasc. 69, 1888) a paper on the early Vene-
tian painters, entitled *Pittori Veneziani nel milletrecento*. He reviews the
works of the XIII, XIV and XV centuries, adding largely to the list of known
artists and to the list of early works. Of especial interest are his remarks
on the Semitecolo family.

FRANCE.

NARBONNE.—An inscription on a bronze tablet recently found here appears
to contain a fragment of the *Lex concilii Narbonensis*, i. e., the regulations of
the Provincial Assembly of Narbonne. The discovery is important, as this
is the first document of the kind found. The fragment contains portions

of thirty lines, belonging to five paragraphs of the regulations, which relate almost entirely to the office of flamen.—*Acad. des Insc. et Belles-Lettres*, Feb. 24; *Soc. Nat. des Antiquaires*, Feb. 29.

SWITZERLAND.

The excavations at Avenches (Aventicum), in Canton Vaud, which have just been recommenced, promise favorably. A mosaic in a perfect state of preservation has been unearthed in Sellex.—*Athenæum*, April 21.

GERMANY.

ALTEBURG (near Köln).—*Roman camp*.—During 1887, General Wolf undertook excavations at Alteburg which brought to light a rampart over a distance of about 660 met. with towers, and graves on the outside. The General considers this to be the camp of the two Lower Rhenish legions.—*Berl. phil. Woch.*, 1888, No. 13.

BECKERSLOHE (near Nürnberg).—*Discovery of the Hallstadt period*.—An important excavation was undertaken near Nürnberg at the group of tumuli termed Beckerslohe, after a visit of the Anthropological Section to Nürnberg in April, 1887. In the first grave opened were a number of bodies, including that of child, showing it to be a family grave; also the following objects: a bronze fibula in the form of a boat; an armlet; a bronze needle; black-glazed urns and rude vases with linear decoration. The second had a rude vault, built of Dolomite blocks, about 5 met. wide and 1.10 met. high: in it lay a single skeleton, that of a warrior, surrounded by an interesting collection of objects; an elegant and artistic bronze breastplate whose side-pieces were ornamented with quadruple spiral decoration; six bronze armlets with elaborate linear decoration; three *torques*, one of which is like that worn by the "Dying Gaul"; several toe and finger rings; some vases of black ware. No breastplate like the above had ever been found in Germany.—*Berl. phil. Woch.*, 1888, Nos. 11, 12, 13.

HANAU.—*Late excavations of the Hanauer Geschichtsverein*.—Under the title *Neue Ausgrabungen des Hanauer Geschichtsvereins im römischen Grenzlande*, Georg Wolff of Hanau gives, in the *Berl. phil. Wochenschrift* (1888, Nos. 10, 11) an account of the excavations undertaken, during the last three years, in the Roman boundary-lands (*Grenzland*) by the Historical Society of Hanau. They were begun at Grosskrotzenburg, on the southernmost limit of the district. The ruins of the hypocaust of the 4 cohorts of Vindelician auxiliaries were found; another building was recognized as a bath; and the existence was proved of a bridge across the Main at this point, connecting the camp with the *Porta principalis dextra* and the *Porta decumana*. Other excavations near Kesselstadt brought to light a destroyed graveyard. For details we refer to the above-mentioned exhaustive account.

KÖLN.—*Museum of the Decorative Arts.*—A Museum of the Decorative Arts is about to be founded in Köln, opposite the Wallraf-Richartz Museum from which all objects of art and curiosity are to be removed for the benefit of the new institution.—*Chron. des Arts*, 1888, No. 9.

TURKEY.

CONSTANTINOPLE.—The Turkish Government has granted 4,000 l. for the extension of the Imperial Museum at Stamboul, so as to house the Sidon antiquities. Meanwhile, Hamdi Bey, the Director, has gone to Sidon to look after his excavations.—*Athenæum*, May 5.

RUSSIA.

DOLMENS IN SOUTHERN RUSSIA.—Mr. Felitzin has recently been exploring the dolmens in the Tcherkess country with interesting results. They are generally of a uniform construction—a flat slab supported on four upright stones, presenting the effect of a large table. Two of the sides are long, and the other two short. Beneath them have been found spiral bronze rings, arrowheads of flint and bronze, bronze heads, cowries, red ochre, *etc.* The age is generally considered very remote. M. Felitzin lately reported in detail his explorations to the Archæological Society of Moscow.—*Amer. Antiquarian*, May, 1888.

ST. PETERSBURG.—*A museum of the Middle Ages and the Renaissance.*—Professor Kondakoff, author of the *Histoire de l'Art Byzantin*, has been appointed Professor at the University of St. Petersburg and Director of the new Museum of the Middle Ages and the Renaissance established near the Hermitage. This museum includes the Basilewski collection, recently purchased by the Emperor.—*Cour. de l'Art*, 1888, No. 14.

ENGLAND.

CAMBRIDGE.—At the April 19 meeting of Society of Antiquaries of London, Professor Middleton communicated a note on the recent discovery of a Saxon cemetery of large extent in the cricket field of St. John's College, Cambridge, of which he promised to lay before the Society a more detailed account later.—*Athenæum*, April 28.

LILLESALL ABBEY (Salop).—Mr. C. C. Walker, at April 17 meeting of Soc. of Antiq. of London, read a paper on recent excavations at Lilleshall Abbey, Salop, resulting in the laying bare the foundations of the whole of the conventual buildings and other remains. Mr. Walker's paper was illustrated by a very complete series of plans and photographs, with numerous tiles, and other objects found during the work.—*Athenæum*, April 28.

LONDON.—*The Roman Wall of London.*—On the afternoon of Thursday

(April 26) there was a gathering of antiquaries on the ground recently cleared by the Office of Works to the north of the new Post Office. The site was acquired by the Post Office last year for buildings to be called the New North Post Office. It had been occupied by the Queen's Hotel, by the French Protestant Chapel, and by a narrow street called Bull and Mouth Street. It faces St. Martin's le Grand and the churchyard of St. Botolph's, Aldersgate Street. On the churchyard face is an ancient wall which had always been taken to be part of London Wall, and though much dilapidated and patched it has undoubted marks of late mediæval building. This old wall was also supposed to mark the site of the more ancient wall. Indeed, the position of Aldersgate, at the N. E. corner of the property, made the former existence of the wall there undoubted. Whether, however, the ancient wall still remained or had been quite destroyed was a question; and it is much to the credit of the Office of Works that one of its first acts on getting possession of the ground was to sink pits near the face of the boundary wall to determine whether the older wall was actually below it or not. As most of our readers know, Roman London is entirely underground. It will not surprise them, therefore, that the result of the digging was to show the original wall, of which the upper part only had been broken down. The existence of the first wall being thus declared, the Office of Works has very properly had the whole face of it cleared, and the purpose of the gathering on Thursday was to get an inspection of it by the antiquaries of London. The meeting was organized by the Society of Antiquaries, who invited members of other archæological societies of London to meet them.

There, standing almost perfect, its masonry sharp and true as on the day it was finished, was at least a hundred feet of the Roman wall of London. The structure of the wall is what we should expect in the south of England—facing courses of stone and tile, with grouted core. The stone is what we now call Reigate, or "rag," the tiles of the beautiful red produced by the London clay when not adulterated with London dirt. There are three stepped coursings for footings, then three courses of tiles set with thick beds of mortar between, and, on these, five courses of stone with fine joints; then two courses of tile with thick bed of mortar, another stage of five courses of stone, and again two courses of tile; set back from this face 6 in. is another stage of five stone courses with two of tile, and then begins more stone coursing which is nowhere complete—in all about 10 ft. of wall at the highest part. The facing stones are "pitched," the faces being 9 in. or 10 in. long by 6 in. Five courses, therefore, made exactly 30 in. The tiles are 1½ in. thick and 12½ in. square. Two courses of tile with the thick mortar bed make 5 in.

In one place the face of the wall has been unfortunately cut away by

the excavators, who imagined they must keep their cutting parallel with the later boundary wall. This wall is naturally much thinner, and is built on the old wall, but does not follow the line of its face.—*Athenæum*, April 28.

NORWICH CASTLE.—The process of removing the prison buildings which completely filled up the shell of the fine old keep of Norwich Castle (the second largest Norman keep in England) is rapidly approaching completion, and several Norman arches of great interest have been uncovered; and a spiral Norman staircase leading to the basement, which had long been filled up with concrete, has been carefully reopened.—*Athenæum*, March 31.

ST. ALBANS.—April 18, Brit. Arch. Assocn.: The arrangements for the proposed excavation of the site of the ancient chapel of St. Germanus at St. Albans were referred to, and it was announced that the work would soon be begun, under the direction of Mr. J. Harris.—*Athenæum*, April 28.

TOCKINGTON.—April 18, Brit. Arch. Assocn.: Mr. R. Mann exhibited a series of drawings of the fine Roman villa recently discovered at Tockington, Gloucestershire, not far from the course of the old Roman road up to the Severn at Old Passage. The site is within the area of a modern-looking farmhouse, and the remains have been found at a depth of only a few inches beneath the modern level. Five tessellated pavements have been already more or less uncovered, and their designs are of great beauty. The walling shows that a large portion of the villa had been reconstructed at a different axis from that of the older work, and there are many indications that the site has been occupied, perhaps from Roman times to the present day. The farmhouse on examination shows several signs of early work.—*Athenæum*, April 28.

A. L. FROTHINGHAM, JR.

SUMMARIES OF PERIODICALS.

BULLETIN DE CORRESPONDANCE HELLÉNIQUE. Athens and Paris.
Vol. XI. 1887. No. 5. May-Nov.—G. COUSIN and G. DESCHAMPS, *Site and ruins of the city KYΞ in Karia* (pp. 305–11). The city Kêς is not named in ancient writers: it is mentioned, in a decree of the people of Stratonikeia, as one of the cities that promised to respect the right of asylum claimed by the temple of Hekate (*Bulletin*, ix, p. 474). Six inscriptions from Béli-Pouli (παλαιὰ πόλις), here edited in full, show that this town is the site of the ancient city. The inscriptions are late: No. 1, A. D. 52, is a long dedicatory decree; No. 3 furnishes Herakleis as the name of one of the tribes of Kys.—L. DUCHESNE, *Makedonios, bishop of Apollonias in Lydia* (pp. 311–17). The epitaph discovered by Fontrier in the plain of the Hermos (*Bulletin*, xi, pp. 79–107) is that of a bishop contemporary with the emperors Constantine, Julian, and Valens: nothing is known of him except his name: he cannot be identified with any other prelates of the same name; his epitaph shows that he belonged to an interesting historical group which played an important part in the doctrinal controversies and religious persecutions of the fourth century of our era.—P. PARIS, *Excavations at Elateia: Inscriptions from the temple of Athena Kranaia* (pp. 318–46). Fifteen inscriptions: No. 1 shows that the cult of Athena Kranaia was prolonged into the period of the Roman empire. The epithet *κραναία* is not derived from *κράνος* "helmet," but from *κρανίον* "head," figuratively applied to elevations; it thus means also "rugged," "barren" (cf. Hesych. s. v., Ἀθηνᾶς κραναῆς). The cult of Athena had taken deep roots in Phokis. Nos. 2–8 are a very interesting series of fragments of inscriptions illustrating enactments made by the Amphiktyons at the close of the third sacred war (355–346 B. C.) Diod. Sik. (xvi. 60) is authority for the statement, that the vanquished and sacreligious Phokians were required to pay a war-indemnity to the amount of 10,000 talents, 60 talents annually (cf. Dem., *F. L.*, 361; Paus., x. 2, 3). These inscriptions, which range in date between the fourth and second century, are records of the semi-annual payments; they consist when complete of a statement of the sum paid, names of officials (Phokian and Delphian) paying and receiving the money, and names of witnesses. These inscriptions will supplement others found at Thebes which give a list of subscriptions made to meet the expenses of war on the part of the Amphiktyons, in defense of the temple of Pythian Apollon (*Αθήναιον*, 1874, p. 479). No. 9 is a decree of the

Phokians recognizing the right of asylum claimed by the Tenians for the temple of Poseidon and Amphitrite in their island, awarding five minae as a contribution toward the restoration of the temple (*ἐν τὰν κατασκευὴν τοῦ ναοῦ*), providing for a gift of one mina and a banquet to Thestias, delegate from Tenos, etc. No. 10 is the record of an act of enfranchisement passed by the demos of Elateia, the *συνέδροι*, and the owner of the slave. The word *χειροσκόπος* is here used in the sense, hitherto unknown, of "teller" (cf. Suidas, s. v.). No. 13: Paus. x. 34.5 tells of Mnasioulos who had won victories at Olympia in Ol. 235, and had a statue at Elateia. This inscription is set up in honor of his son, and is probably not later than about 180 A. D. In No. 14 the author restores Löwy, *I. G. B.*, No. 135c, as follows: *π]ότνια Ἀθανά, τόδε [δέξει ἀμεμφὲς ἄγαλμα] | τὸ πρέπον ἐν χαλκῷ σ[οί γ' ἀνέθηκα σέβων], | ἐξ ὁσίων ἔργων ἀκροθίν[ια, μνήμα δέ]και[ον.*—M. CLERC, *Inscriptions from the valley of the Maiandros* (pp. 346-54). Twelve inscriptions of the Empire, dedicatory, honorary and sepulchral: from Tralleis (1), Nysa (2), Attoudda (2), Laodikeia (4), Kolossai (3). No. 5 (from Attoudda), combined with other evidence, literary and numismatic, shows that Isauria as a province was detached from Galatia, probably by Antoninus, and reunited by that emperor, before 138 A. D., with Kilikia and Lykaonia under a praetorian legate. Under Commodus it was combined with the proconsular province of Lykia-Pamphylia. Under Septimius Severus it was detached and reunited with Kilikia-Lykaonia, but, in restoring the ancient organization of Antoninus, Severus increased the importance of the province and put it in charge of a legatus of consular rank. This arrangement continued, in all probability until the changes introduced by Diocletian.—M. HOLLEAUX, *Excavations at the temple of Apollon Ploos: Archaic Statuettes* (pp. 354-63; pls. x, ix). The former of the two statuettes here published belongs to the "*Série des Apollons archaïques de la seconde manière*:" this series is characterized by the position of the arms, which are detached from the body, each hand holding an attribute. This figurine shows an advance, on the part of the Boiotian artist, in the type of face and hair, in the general structure of the body and in style. Pl. ix represents a warrior with shield: he wears a large helmet with flowing crest, is naked, except for his greaves, thus resembling several of the Aiginetan figures. This statuette is probably slightly later than one from Dodona which it much resembles (*Arch. Zeit.*, 1882, Taf. 1, p. 23 ff.); both show a serious study of forms and a technical skill, and doubtless came (about 500-450 B. C.) from Peloponnesian artists who were dominated by the influences that show themselves in the Aiginetan marbles.—P. FOURCART, *List of enfranchisements from the city of Halos in Phthiotis* (pp. 364-72). Two long inscriptions, 76 and 72 lines; not earlier in date than 179 B. C. nor later than the time of Augustus. The record extends over

two years, dated by the names of two Thessalian στρατηγοί, Ptolemaios and Italos. The lists contain the names of 42 slaves (17 men and 25 women) each one of whom on receiving freedom paid into the public treasury the sum of 15 staters. In several instances the slave is freed *κατὰ διανόησιν* (perhaps sometimes equivalent to *κατὰ διαθήκην*): in these cases the formal requirements of the law had not been satisfied and were waived. Three slaves who receive their freedom agree to remain with their master as long as he lives. The acts of enfranchisement are grouped under months. The inscription throws light on the calendar of the people of Halos, which differs from that of the neighboring Thessalians, of the Perrhaiboi, of Lamia, and of the Magnesians: the names of the months are Ἀδρόμιος, Εὐνόσιος, Πυθολος, Ἀγναίος, Γενέτιος ἑμβόλιμος (in the second year), Διονύσιος, Μεγαλάρτιος, Θεμιστίος, Δέματρος, Ἐκατόμβιος, Ὀμολόιος, Θυῖος.—G. DESCHAMPS and G. COUSIN, *Inscriptions from the temple of Zeus Panamaros: a sacerdotal family, Tib. Flavius Aeneas and his children* (pp. 373–91). Seven long inscriptions of the period of the Antonines. Zeus Panamaros was (with Hekaté) the especial protector of Stratonikeia in Karia. The site of his temple and more than 400 inscriptions were discovered by Deschamps and Cousin in 1886. The larger number of the inscriptions are in honor of the priests and priestesses of the god. The functions of the priesthood were often discharged by members of the same family. Inscriptions are here given in full in honor of Tib. Flavius Aeneas and of Flavia Paulina, daughter of Jason; of Tib. Flavius Theophanes; of Jason and Statilia. These inscriptions throw much light on many interesting customs; among the most curious is one relating to the consecration of human hair: Ἐπὶ ἱερέως Τιβ. Φλα. Αἰνείων Ἰάσονος, κόμαι Χαϊρήμονος, Ἀγαθοβούλου, Ἰεροκλέους, Διονυσίου, Ἡρακλείδου, Μαντιθείου (cf. Hom., *Il.* xxiii. 141; Aisch., *Choeph.* 6; Lucian, *De Dea Syria*, 60).—G. RADET and H. LECHAT, *Notes on ancient geography: I. the city of Aigai in Aiolis, II. Attaleia in Lydiá, III. Sandaina* (pp. 391–404). I. The statements of the ancients as to the site of Aiolian Aigai are not definite: by the help, however, of coins, of numerous late inscriptions (especially one, of Roman times, found at Mafoullar-Keui, here published) the authors identify the site with that of the modern village of Sari-Tcham: this village, not on Kiepert's map, is about five hours N. E. of Magnesia. II. Radet defends his identification of Attaleia (*Bulletin*, xi, p. 168; cf. *JOURNAL*, vol. III, p. 214). Attaleia could not have been at Mermerch, as has been claimed by archaeologists, on the strength of an inscription from that place, which has been read: *θήσει εἰς τὸ ἱερώτατον ταμίον Ἀτταλέων*. The author has examined this inscription anew: for Ἀτταλέων we must now read, . . . ἄττικας . . . [Χ']λίας, or “. . . thousand Attic drachmae,” a phrase which occurs in several other inscriptions here quoted. Three inscriptions are appended which mention Attaleia. III. Sandaina. This town is known

only from being named ($\delta \delta\eta\mu\omega\varsigma \delta \Sigma\alpha\rho\delta\alpha\upsilon\epsilon\iota\tau\omega\upsilon\acute{\nu}$) in a short inscription of Roman times, here published, from Tshavdir.

No. 6. December.—P. PARIS, *Excavations at the temple of Athena Krania at Elateia: the ex-votos* (pp. 405–44; pls. III, IV, V: completed in Vol. XI. pp. 37–63). A vast number of *ex-votos* were found in the rubbish outside of the temple of Athena Krania, terracottas, bronzes, glass, *etc.*: these objects had been thrown away by the temple officials. A few pieces have artistic value. The terracotta heads are doubtless in larger part from Tanagra. The Elateia figurines were plainly objects that had been cherished and used by their givers, and for that reason alone had been offered to the goddess: the same is true of the bronze objects, and in part of the terracotta cones, pyramids, and disks. There is no evidence that they represented the idea of substitution, and they had no intrinsic religious meaning. Of the nearly 850 fragments of terracottas, heads, torsos, *etc.*, about 30 are mythological (Athena, Aphrodite and Eros, Demeter, Leda and the Swan); the rest are miscellaneous, mainly representing women, old and young; there are a few fantastic figures, and animals. A full catalogue of these fragments is given.—G. RADET, *Inscriptions from Lydia: I. between Sardeis and Thyateira, II. Thyateira, III. between Thyateira and Julia Gordus, IV. between Thyateira and Stratonikeia-Hadrianopolis* (pp. 445–84). Seventy-three inscriptions, mainly of Roman times, copied by MM. Lechat and Radet in 1886. They are honorary and sepulchral. One is dated 1460 A. D. In No. 34 are many new proper names: No. 70 (from Baïat) is noteworthy as being a dedication from a *thiasos* to their *ἀρχιμώρως*.—G. FOUGÈRES, *Report on excavations at Mantinea* (pp. 485–90). These excavations extended from June 23 to Sept. 20, 1887, and covered a considerable part of the territory within the ancient walls of Mantinea. The theatre, as made over in Roman times, was in part uncovered and its plan clearly made out. Two large buildings near the theatre were discovered, one of which was doubtless the temple of Hera. The agora lies near the centre of the town, about 100 met. east of the theatre, not at the north as E. Curtius maintains: it was connected with the theatre by a long line of porticos. Into several Byzantine structures were built numerous interesting fragments of architecture, of which one series, twenty-five capitals, shows in regular sequence the different phases of the orders of columnar architecture from the archaic period to Roman times. The pavement of an ancient street, 480 metres long, was disclosed. The discoveries of sculptures are not considerable: the most important are an archaic mortuary stele, with female figure in low relief, and three white marble panels with reliefs, representing, probably, the musical contest between Apollon and Marsyas; six muses are present. It is probable that these sculptures were on the pedestal of the statue of Leto by Praxiteles (Paus., VIII. 9; cf. *Bulletin*, vol. XII. pp. 104–28). Other fragments are

statuettes, torsos and heads, feet, etc., of different periods. About thirty inscriptions were found (not yet published), including an archaic text, in an Arcadian dialect, of a law of some religious regulation, 36 lines; and dedication by Philopoemon after the battle of Mantinea, 23 lines. The other inscriptions are late, honorary or dedicatory. Many minor objects were found, of miscellaneous character, over 100 coins of different epochs, tesserae, inscribed lamps, figurines, masks, a mosaic: also two objects from the neolithic age found in buildings of the Roman epoch, and fragments of painted vases of the style of Mykenai. The publication of these discoveries will be awaited with interest.—*Table of contents of Vol. XI* (pp. 491–95).

Vol. XII. 1888. Nos. 1-2. Jan.-Feb.—P. FOUCART, *Athenian Decree of the sixth century B. C.* (pp. 1–8). This monument, found in 1883 and first published by Köhler in *Mittheil.*, ix, p. 117, is the oldest extant inscribed Athenian decree. The author, who furnishes a facsimile, suggests the following as the most probable, though not certain, restoration of this very important inscription: "Ἐδοξεν τῶι δήμῳ· [τὸν λαχόντα κλήρον] || οἰκεῖν ἐ[ν] Σαλαμῖνι, [καὶ ἐν Ἀθηναίοις] || σι τ[ε]λ[εῖν] καὶ στρατ[εύειν, τὸν δὲ κλήρον μ] || ἢ μ[ε]σθ[ε]οῦν·—ἐὰν μὴ οἰκ[ῇ] ἐν Σαλαμῖνι κλήρο] || ν δὲ μισθῶι, ἀποστ[είναι] τὸν μ] || ἰσθούντα ἑκάτερ[.] || ἐς δημόσι[ον, ἐκπράττειν τὸν α̃] || ρχόντα·—ἐὰν [δὲ μὴ ἀποτείσῃ] . . . || ἀδε . σπιαπ[. . . προσοφείλειν τ-] || ριάκοντα δρ[αχμάς, ἐκπράττει] || ν δὲ [τ]ὸν ἀρχόντα καὶ καταβάλλει || ν ἐ[π]ὶ τῆς β[ουλῆς]. (Of course in the above ε, η, α stand for E, and ο, ον, ω for O in the original; ξ = χσ). In defending and interpreting this restoration, the author draws illustration from Thouk., iii. 50; vii. 57; Plut., *Per.* 11; *C. I. A.*, i. 31, 443, 444; ii. 14. He concludes, (1) that a *klerouchos* of Salamis was ranked with the Athenians as regards payment of taxes and military service; he must live in the island and not rent his land: (2) if he violated this regulation he had to pay an indemnity to the state; and (3), if he was remiss in paying this indemnity, he was subject to a fine of thirty drachmae, which it was the business of the archon to collect.—G. COUSIN and CH. DIEHL, *Inscriptions from Mylasa* (pp. 8–37). Twenty inscriptions, many of which are over 15 lines in length; of Roman times. No. 1 is the copy of a decree passed by Kretan cities awarding honors and privileges to Mylasians. No. 2 decree honoring a high-priest, perhaps ἀρχιερεὺς τῆς Ἀσίας. In No. 3, Zeus Osogos is named. Nos. 4–7 are miscellaneous decrees, mainly of the Ὀρωρικονδεῖς of Mylasa. Nos. 8, 9 are public records of sales; they are long and detailed. The remaining inscriptions are mostly sepulchral, and like all late specimens of this class are fulsome in language.—P. PARIS, *Excavations at the temple of Athena Kranaia at Elateia: catalogue of the ex-votos* (pp. 37–63 with 25 woodcuts; continued from vol. xi, p. 444). This article contains a catalogue of the votive terracotta pyramids and cones, vases, articles in metal, bone, and

glass, toilette articles, etc., found at Elateia. One of the pyramids bears an inscription Θεωπις Ἀθαρῶν. Among the fragments of vases are some of the ancient ἀσάμυνθοι, or bath-tubs, which Paus. says were used by the priests of this temple. Many of them bore the inscription Ἀθαρῶς ἱερός, which was also placed on other vases used in the temple. Among the fragments of vases, some of which are very early (geometric patterns), may be named those of a lekythos, of kylikes, oinochoai, krateroi; of a rhyton; of vases with reliefs. The bronze articles include *ex-votos* in the form of a tiny horse, birds, swans, ducks; *appliqué* ornaments for vases in the form of bands, anthemias, rosettes, *guilloché* designs, spear-heads, over 200 bronze rings. The toilette articles include many pins, hair-pins, and brooches of elaborate design. Among the miscellaneous objects may be named a pen made of bone, and the model of an Ionic column.—H. LECHAT and G. RADET, *Notes on two proconsuls of the province of Asia: Vettius Proculus, Lollianus Gentianus* (pp. 63–9). An inscription, found in June, 1887, at Aidindjik near the site of ancient Kyzikos, proves that Vettius Proculus, known hitherto only from a coin in M. Waddington's collection, was ἀνθύπατος in 115–116 A. D., and not, as Waddington asserts, in 112 A. D. In this inscription the Emperor [Trajan] has the titles Δακικός, and Παρθικός, the latter of which was given him in 115 A. D. In the second inscription, from Debleki, one hour from Panderma (Panorme) Lollianus Gentianus is named ἀνθύπατος when Caracalla was tribune for the twelfth time, i. e., in A. D. 209.—A. SCHTSCHOUKAREFF, *Athenian archons of the third century B. C.* (pp. 69–81). This article is based on an Eleusinian inscription, lately discovered, and published by Philios in the *Ἐφημ. Ἀρχ.*, 1887, p. 1 ff. The inscription is a long decree, in honor of Demainetos, strategos of the region of Eleusis, passed by the Athenian soldiers on the Boiotian frontier: the date is in the reign of Philip V (i. e., between 221 and 179 A. D.). The author discusses the possible dates of the Athenian archons named in this decree, Chairephon, Diokles, Aischron; and, by including other evidence, extends his inquiry to the possible archons between 226 and 205 B. C. He infers that the only possible dates for Chairephon are, B. C. 218, 217, 214, or 213; for Diokles, B. C. 214, 213, 210, or 209; for Aischron, B. C. 210, 209, 206, or 205.—G. DESCHAMPS, and G. COUSIN, *Inscriptions from the temple of Zeus Panamaros* (pp. 82–104; continued from vol. XI, p. 391). Four of these inscriptions relate to Marcus Sempronius Clemens; his offices civil and religious, his titles, and the honors bestowed upon him by his fellow-citizens: he lived about 200 A. D., and was priest of the Augusti, of Zeus Panamaros, Zeus Chrysaor, Zeus Narasos, Zeus Londargos, of Hekate; his civil offices were more numerous than the religious: he was στεφανηφόρος, δεκάπρωτος, gymnasiarch, εἰθνη-άρχης, one of the prytanes, γραμματεὺς. He was born at Koliorga; to this

town as well as to Panamara and Lagina he gave statues, and perhaps to the former a temple of Apollon: he made an aqueduct for Stratonikeia, he beautified the senate-house and constructed for it a chapel: in this chapel he placed three εἰκόνας κορυλλικάς. He is praised for his good deeds in extravagant language, and receives from his fellow-citizens many marks of distinction. Four inscs. relate to the consecration of hair; seven more relate to descendants of Marcus Sempronius Clemens, to the third generation.—G. FOUGÈRES, *Bas-reliefs from Mantinea: Apollon, Marsyas, and the Muses* (pp. 105–28; pls. I, II, III). An important account and discussion of three reliefs discovered August 11, 1887. One represents Apollon Kitharoidos seated with kithara in hand to left: Marsyas blowing the double pipe, in the attitude of Myron's Marsyas, to right; in centre, a slave in Phrygian dress with drawn knife, ready to flay the satyr: each of the second and third reliefs represents three muses in grave and graceful attitudes, with psalterion, pipes, small kithara and volumina, as attributes. These three reliefs undoubtedly formed three sides of a pedestal, the fourth being lost, of the statue of Leto and her children made by Praxiteles for Mantinea (PAUS., VIII. 9: ἐπὶ τῷ βάθρῳ Μοῦσα καὶ Μαρσύας αὐλῶν, where Μοῦσαι should be read for the Μοῦσα of the MSS.). They belong to the fourth century B. C. and distinctly show the influence of Attic traditions, the Muses recalling figures in the frieze of the Parthenon: it would be hazardous to refer them to the hand of Praxiteles, though they may have been designed by him. The article contains several good remarks on the representations of Apollon and Marsyas, and of the Muses, in Greek art.—K. Δ. ΜΥΔΩΝΑΣ, *Inscriptions from the Akropolis* (pp. 129–52). Edited in modern Greek, are thirteen fragmentary inscriptions discovered in Nov. and Dec., 1887, on the Akropolis, east of the Parthenon, mainly under the crepidoma of the temple of Roma and Augustus. Nos. 1 and 2 are of the fifth century B. C., in the older alphabet; the remainder are of the fourth century B. C. No. 1, of 28 lines, is a fragment of a decree in honor of Leonidas of Halikarnassos: probably of the time soon after the Sicilian expedition. No. 2, of 16 lines, decree moved by Nikomachos: in a very imperfect condition. No. 3, of 15 lines, decree conferring proxenia on Lykon the Achaian, probably before the Peace of Antalkidas. No. 4, of five lines, decree conferring proxenia on five citizens of Abydos here named; first quarter of fourth century B. C. The inscription is surmounted by a relief representing armed Athena bareheaded and seated, with a standing female figure in an attitude perhaps of appeal. No. 5, of 11 lines, part of a decree conferring proxenia. No. 6, of 25 lines, relates to an oath to be taken at Athens by the representatives of the Methymui, in the presence of the commissions of the allies (σύνεδροι) and of the Athenian generals and hipparchs; the date is probably B. C. 378/7. No. 7, of 14 lines, a decree proposed by Kallistratos, pro-

bably the great orator, in favor of Polychartides, and his son Alkibiades. No. 8, of 11 lines, decree conferring proxenia on Kallipos the Thessalian: it furnishes the earliest known use of the expression *γνώμη στρατηγῶν*, hitherto found only in the spurious documents in the MSS. of the Attic orators. No. 9, of 20 lines, confers proxenia on Theagenes of Naukratis in Egypt, in 349 B. C. No. 10, of 9 lines, beginning of a decree proposed by Stratokles (about 310 B. C.). No. 11 is doubtful. No. 12, of 19 lines, decree in honor of Philonides for his *ἐπιμέλεια τῆς περὶ τοὺς ἐφήβους*, B. C. 303. This is the earliest inscription in which the ephebic discipline is referred to, which figures prominently in inscriptions of the second century B. C.; no other inscription of the period B. C. mentions the office of *σωφρονιστὴς τῶν ἐφήβων*, held by Philonides. No. 13, of 22 lines, fragment of an inventory of the *ταμίαι τῶν ἱερῶν χρημάτων τῆς Ἀθηνάας καὶ τῶν ἄλλων θεῶν*, of B. C. 398/7: this inscr. is, in part, a duplicate of one published by Foucart in *Bulletin* 1878, p. 37.—P. F[OUFCART], *Note on an inscribed stele from the Akropolis* (p. 152). The stele bears the following words, which were the beginning of an act of a guild of Artemisiastai in honor of Mousaios of Kyrene: *οἱ Ἀρτεμισιασταὶ Μουσαίων Κυρηναίων*. This guild was probably made up of foreigners in Athens, and the Artemis, who was the patroness of their thiasos, was probably a non-Hellenic form of this divinity. J. H. WRIGHT.

BULLETTINO DELL' IMP. ISTITUTO ARCHEOLOGICO GERMANICO. SEZIONE ROMANA. Vol. II. No. 1.—W. HELBIG, *On a Portrait of Livia* (pp. 3–13; pls. I, II). The portrait-bust here published (pl. I) is that of a Roman matron of about fifty, of the period of the Julian Emperors, wearing a wig. Helbig recognizes in it a representation of Livia, the mother of Tiberius, of whom only mediocre portraits have until now been available. Livia is reproduced, (1) on a cameo at Wien, as *sacerdos Augusti* (Bernoulli, *Rom. Ikon.*, t. 27, 2); (2) on a cameo at Firenze, where her head is placed by that of Tiberius (Bernoulli, t. 27, 8); (3) on several gems (Bernoulli, t. 27, 1); and (4) on a famous cameo in Paris (Bernoulli, t. 30) in which she has the attributes of Ceres. The Viennese cameo strikingly resembles the published bust. On pl. I is published a bronze coin struck in 22 A. D. under Tiberius, with the insc. *SALVS AVGVSTA*, and a female portrait that must be that of Livia, and extremely characteristic. To be added to this list is a cameo (carnelian) mounted in a gold ring found near Podescia in Sabina and now in the Berlin Museum, in which the head resembles that on the coin and also the marble bust. A greater or less abundance of natural hair enables Prof. Helbig to establish a chronological order in these portraits. Unlike any of them is a small bronze bust found near Neuilly-le-Réal in Gallia Lugdunensis with the inscription: *Liviae Augustae Atespatus Crixii fil. v. s. l. m.* As it

was found with a corresponding bust of Augustus, the title *Augusta*, which she received only after his death appears strange. The divergence in type between this portrait and all the others is explicable on the supposition that it was executed by a second-rate provincial artist unfamiliar with the physical and intellectual characteristics of the Empress. The marble head shows Livia to have possessed great beauty, strength of character and will, and calm power. The lips are thin and the mouth sharply cut, the forehead low, the nose strong, the eyes are cold, and the lower part of the face broad and firm. On pl. II is published a small bronze bust recently purchased by Sig. T. Castellani, which appears to represent, in the portraiture of Livia, an intermediary stage between the coin of 22 A. D. and the marble head.—G. HENZEN, *Inscription found near the "Galleria del Furlo"* (pp. 14-20). The following inscription has been found on the Via Flaminia: VICTORIAE SACRVM | PRO SALVTEM IMP | M IVLIO · PHILIPPO FELICI | AVG PONT MAX TRIB POTIII | COS P PET M I//I/O// LIPPO | NOBILISSIMO CAES PRINCIPI | IVVENTVTIS ET MOTA-CILIAESE | VERE AVG MATRI CASTRORVM | MAIESTATIQUE EORVM | AVRELIVS · MVNATIANVS EVO · CATVS · EX COHORTE · VI · PRETORIA PV PHILIPPIANA · AGENS · AT | LATRVNCV-LVM · CVM MILITI | BVS · N · XX · CLASSIS · PPR · R · RAVE | NATIS · P · V · FILIPPORVM DEVOT^{num} | MAIESTATIQUE · EORVM | DICATAM PRESENTE | *albi*NO COS · VI · IDVS |, etc. The dedication is made in 246 A. D., under the consulate of Presens and Albinus, for the safety of the Emperor M. Julius Philippus, etc., by Aurelius Munatianus, an *evocatus*, and 20 soldiers of the Ravennese fleet, placed under him for the suppression of brigandage in that part of the Apennines. Prof. Henzen accentuates the difference between the *evocati* of the republican period (who were retired soldiers that took up arms again only of their free will or at the call of a leader for a special purpose) and those of the imperial period (who formed a fixed body—a militia of distinction), who were but slightly inferior to the centurion. The inscription is another proof of the prevalence of brigandage in Italy under the empire.—CONTE DI MONALE, *The Faliscan antiquities found at Civita Castellana and Corchiano and the site of Fescennia* (pp. 21-36; pl. III). In this account a description is first given of the discovery of a Faliscan temple near Civita Castellana—probably that of Juno Curites—with its terracotta revetments of wooden (?) columns, and fragments of pediment-statues, in which Di Monale recognizes three distinct constructions: (a) a very early tempietto on the N.; (b) a temple dedicated to Orestes; (c) a building which probably represents the reconstruction of the primitive temple [a more complete description of this temple is given, JOURNAL, vol. III, pp. 461-64]. The writer then seeks to establish the site of the ancient Fescennia, the neighbor of

Falerii, placing it near Corchiano on a plateau called Vallone: the present village of Corchiano he considers to occupy the site of the *arx*. The neighborhood of Corchiano is rich in archæological remains. Faliscan inscriptions and rock-cut tombs are numerous: the latter are often similar to those found at Castel d'Asso. A number of the landed proprietors of this region, on whose property the ancient nekropolis is situated, have recently made interesting discoveries in tombs which they have opened during the last year [cf. JOURNAL, vol. III, p. 468].—W. HELBIG, *A gold fibula found near Palestrina* (pp. 37–39). This fibula was purchased at Palestrina in 1871, and belongs to the class generally termed “with the serpentine curve.” Such gold fibulae have been found only in tombs whose contents resemble that of the Regulini-Galassi tomb at Caere, and which may with certainty be attributed to the VI century B. C. To the same stratum belong (1) a group of tombs excavated at Palestrina in 1855 by Prince Barberini, which yielded three gold fibulae similar to the present; (2) another tomb discovered in 1876 by the Signori Bernardini, in which an almost identical fibula was found; (3) another was found in one of the earliest known *tombe a camera* at Chiusi (*Mon. d. Inst.*, x, t. 39^a), whence came also a second, probably from the same stratum. Such fibulae have never been found in tombs containing Attic vases with black or red figures of the close of the VI or the V century. The age being ascertained, it is extremely important, as bearing the earliest known Latin inscription and showing a Latin manufacture at a period when it is very difficult to distinguish between what was imported and what was produced in the country. The fact that writing was used in the VI century by the inhabitants of Palestrina in their private life removes all improbability regarding the commercial treaty between the Romans and Carthaginians attributed by Polybios to the year 509 B. C.—F. DÜMLER, *The inscription on the fibula from Palestrina* (pp. 40–43). The inscription on the fibula described in the preceding paper reads: *Manios : med : Fhe : Fhaked : Numasioi*, “Manios has made me for Numasios.” It is considerably more archaic than the earliest inscription hitherto known, that of the vase of Duenos, discovered and illustrated by Dressel (*Ann. d. Inst.*, 1880, p. 158, t. L), though the differences in the form of the letters is but slight. It modifies the hitherto received division of Italian alphabets into two groups of which one is characterized by the sign *g* instead of the Greek Φ for the sound *f* (Etruscan, Umbrian, and Oscan), the other by the *vau* to indicate the same sound (Latin, Faliscan). Our inscription used the composit sign **FB** for the sound *f*, and we are led to suppose a new division of Italic alphabets into three groups according to the manner in which they replaced, not the discarded Chalkidic sign Φ , but the composit sign **FB** for *f*. The language of the inscription is as archaic as the writing. The reduplication of the

perfect of *facio* was known only in Oscan (*lav. Bantina*).—H. HEYDEMANN, *The love-darts of Eros* (pp. 44–52). In comparison with the frequent mention in literature of the love-darts of Eros, their representations in Græco-Roman art are infrequent. Such a *genre* scene is given on a krater of the Hellenistic period at St. Petersburg (Tischbein, *Vases Hamilton*, III, 39); on a vase of the Iatta coll. at Ruvo; on the great Hebe-vase at Berlin, No. 3257 (Gerhard, *Apul. Vas.*, t. B); on the Meleager vase of the Santangelo collection. All the vases are Hellenistic. To the Roman imperial period belong (1) a sarcophagus at Salonika (*Arch. Zig.*, 1857, t. 100) and (2) a carnelian owned by Martinetti. Similar scenes are represented in Pompeian frescos, and in a Roman fresco published by Winckelmann (*Mon. ined.*, 114, p. 157). In all these, Eros' darts are aimed at mortals, but in others, like a stone from Selinous and a bronze relief from Corneto (Louvre), belonging to the period of the Diadochi, the shaft is launched into mid-air.

Vol. II. No. 2.—G. B. DE ROSSI and W. HELBIG, *Addresses in memory of G. Henzen* (pp. 65–75). At a meeting held in Rome in December, in commemoration of Professor Henzen, recently deceased, Comm. de Rossi and Prof. Helbig described the life and work of the illustrious epigraphist and archaeologist, whose career has been so intimately linked with the history of the German Archæological Institute during the last half-century, ever since he commenced to show the fruits of his studies with the great Borghesi. De Rossi confined himself to Henzen's epigraphical labors: showed the great advance in scientific methods which is due to him, as illustrated especially in the *Corpus Inscrip. Latinarum*. Prof. Helbig dwelt on a less-known, because earlier, side of Henzen's activity—his archaeological work. It was the unusual breadth of his learning that made his epigraphic work so complete and valuable.—C. TOMMASI-CRUDELI, *Reflections on the climate of ancient Rome* (pp. 76–89). A research into the strength and extension of the *malaria* in the neighborhood of Rome in ancient times. The writer shows how many malarious sites in Central and Southern Italy were chosen for settlements, and uses the doctrine of natural selection and the survival of the fittest to account for the acclimatization and vitality of the ancient populations. In Roma itself the diminution, since 1870, of the region affected by *malaria*, shows how much it can be affected by a closer population. The *Agro Romano* was certainly in a healthier condition in ancient times, mainly on account of the immense drains found in almost all the tufa hills (in the Volsci, Latium, Etruria) built to convey away the waters that filtered through the sub-soil—especially from the lakes of Albano, Nemi, Martignano, and Bracciano. This mass of water pressing through the soil was carried off by a cunicular system of drainage consisting of an immense network of subterranean gal-

leries (shown by example at *Forte Bravetta*, between the *Vie Aurelia* and *Portuense*). The writer seeks to prove, that a number of so-called violent deaths in Roman history may be referred to the natural cause of *malaria*, by adducing a number of examples during the Renaissance period in which death, which has always been attributed to poison, was in reality caused by malarial fever: *e. g.*, the deaths of Alexander VI (Borgia), of Giovanni and Garcia, sons of Cosimo I, of Francesco I de' Medici and Bianca Capello, *etc.*—F. STUDNICZKA, *An archaic bronze statue belonging to Prince Sciarra* (pp. 90–109; pls. IV, IV^a, V). This important archaic Greek statue, though found in Roma as early as the beginning of the last century, has never been suitably reproduced or described. In the Barberini inventory of 1738 it is described as *un idolo etrusco*; even Winckelmann considered it Etruscan, and has been followed even lately by Prof. Milani. Prof. Helbig has often referred to it, however, as a Greek work. The statue is 1.11 met. high, and the plates give a front and a side view of it, as well as two enlarged reproductions of the head. It represents a very youthful victor in the games, probably a youth from the Peloponnesos, and was executed apparently about the time of the Persian wars by a Peloponnesian artist related more or less to the school of Sikyon, being one of the earliest works cast by this school—the very earliest we know of being the Apollon Phileaios by Kanachos, which dates from the LXX Olympiad. The restorations are, mainly, the top of the head, the right hand and forearm, the left arm with the horn of plenty, both feet from above the ankles. The figure undoubtedly belongs to the series of so-called “Apollo” statues of the archaic period like the Strangford (Aiginetan school), Piombino, and Payne-Knight (Kanachos) “Apollon,” and those from the temple of Apollon Ptoos. The writer places it in the time that elapsed between the Apollon of Kanachos and the sculptures of Olympia, and compares it to the statue by Stephanos in the Villa Albani.—A. MAU, *Excavations at Pompeii, 1885–86* (pp. 110–38; pl. VI). *Reg. 3. ins. 2, n. 33, 39: house of Joseph II.* In 1885–86 the excavations on the southern edge of Pompeii uncovered again the house called “of Joseph II,” already excavated in 1767–69, and described by Mazois. It is evidently one of the most important of the city. Its ground-plan is almost rectangular, and is perfectly clear. The front (atrium and its chambers) remains, essentially, from the period of the first decorative style, though but little decoration of that time is extant. The first reconstruction affected not the atrium but the parts back of it; and the middle and lower stories remain from this period: later the atrium was rebuilt. The paintings belong to various periods. In the Lararium is a representation of the two Genii of the house, male and female. Near the entrance are frescos of a Nereid on a marine panther; Europa on the bull; flying Erotes. On an inner wall in the left wing is a fresco: a tem-

ple in *antis* (?) stands in the background, and before it are two figures having between them a statue of Harpokrates. Underneath this is a garden-scene. The parts of the house placed behind the atrium, built, painted, and adorned with mosaic pavements in the Republican period are reached by a corridor with wall-decoration in the second style. The tablinum has seven frescos in the latest style, in bad preservation.—G. LIGNANA, *On the inscription of the Praenestine fibula* (pp. 139–40). Some grammatical remarks on the inscription. *Numasioi* is only the second example known of a dative singular in *oi*. *Feked* is the first example of the reduplicated form in archaic Latin—*feked* being the form known. Both these are however founded on the results of historical grammar, and the inscription might well be a learned *recent* combination. The writer proposed, however, an hypothesis which would obviate the difficulties connected with the singularity of these forms—the fibula may have been an Oscan manufacture for the Roman market.—W. HENZEN, *Epigraphic Miscellanea* (pp. 141–45). Publication of a fragment of the *Acts of the Arval Brothers*, and an inscription relating to the *Castellum aquae Claudiae*.—W. HELBIG, *An Etruscan mirror*. A unique subject is represented on this mirror. Two hoplites are seated with an oblong board on their knees, playing a game: they appear to be Achilles (inser. Ε √ . .) and Aias.

A. L. FROTHINGHAM, JR.

ΕΦΗΜΕΡΙΣ ΑΡΧΑΙΟΛΟΓΙΚΗ. JOURNAL OF THE ARCHÆOLOGICAL SOCIETY IN ATHENS. 1887. No. 1.—D. PHILIOS, *Inscriptions from Eleusis* (contin.). 30. This is an inscription in honor of Demainetos, who was strategos over the region about Eleusis in the archonships of Chairephon, Diokles, and Aischron. He had also acted as envoy to King Philip V and the Aitolian league. The dates of these archons are not fixed, but the inscription is here referred to a time not long after 220 B. C.—B. STAES, *Inscription from Epidauros*. This inscription is dated by the names of Aigialeus, strategos of the Achaian league, and Dionysios, priest at Epidauros. These names are, however, unknown, but Aigialeus was probably general after the liberation of Corinth by Aratos. The Epidaurians and the Corinthians being at variance concerning their boundary, one hundred and fifty-one judges were sent by the Megarians to decide the matter. Of these, fifty were Hylleis, fifty-one Pamphyloi, and fifty Dymanes. The Corinthians were not satisfied with their decision, so thirty-one of the same judges (ten Hylleis, eleven Pamphyloi, and ten Dymanes) returned and settled the boundary, the details of which are given, followed by the names of the 151 judges.—P. GEORGIU, *Inscriptions from the Akropolis*. 1. This is another fragment of the list of choragic victories part of which was published in the preceding number (cf. C. I. A.,

II, 971e). Victories under Aristophon (330 B. C. = Ol. 112. 3) and Kephisophon (329 B. C.) are here recorded. The tragic poet Theophilos and the actors Thettalos (?) and Athenodoros are mentioned. II. This is part of an account handed in by a committee of three appointed to superintend the making and placing of two figures of Nike and perhaps some other works. The inscription appears to belong to the time between 436 and 403 B. C. III. This is part of a decree in honor of a foreigner, Python, who is to receive a crown, and be enrolled as an Athenian citizen. The inscription belongs apparently to the end of the fourth century B. C. Then three inscriptions were found near the Erechtheion.—B. STAES, *Statuette of Athena from the Akropolis* (pl. 4). This bronze figure is 0.37 m. in height. It is made of two thin pieces of bronze which were joined by rivets down the front and back. Thus, a figure in the round is made of two hollow reliefs. The figure is upright, with the right foot slightly advanced: it is fully draped, and a large aegis covers her shoulders, breast, and left side: her hair is encircled with a band, and falls down her back, while on each side one lock falls forward upon her shoulders: both forearms are slightly extended toward the front: the right hand is open, but the left is wanting. Pl. 4 gives two views of the figure, besides a section of one side. The work is archaic, but of great excellence. The figure still retains traces of silver adornment and of gilding.—T. SOPHOULES, *Monuments of Archaic Style* (pls. 1, 2). On pl. 1 an archaic marble torso is published of the type commonly called Apollo. This torso was found near the orphan asylum of Chatzekostas, and may have been a sepulchral monument. The proportions of this torso are broader and rounder than those of the Apollo of Tenea or of Thera. This type has been referred to Dipoinos and Skyllis, but it seems to antedate them, unless they lived earlier than is generally supposed. Similar in execution to this figure is the marble torso of a horseman published on pl. 2. This was found, with several fragments of horses, in the excavations on the Akropolis. Parts of horses are here published. Both this work and that of pl. 1 show considerable similarity in style to the Moschophoros of the Akropolis. It is suggested that the roundness of these works may arise from the habitual use of poros stone, the softness of which made angularity less easy.—T. SOPHOULES, *A Bronze Head of Archaic Style* (pl. 3). A bronze head from the Akropolis is published (see Romaïdes, *Musées d'Athènes*, pl. 15). The pointed beard, the treatment of the hair, and the general appearance of the head warrant us in attributing this head to the last part of the sixth or the beginning of the fifth century B. C. Though the head has some points of similarity with the Aiginetan sculptures, it shows much more individuality.—A. STSCHOUKAREFF, *A Supplement to the List of Athenian Archons*. An inscription from near the Erechtheion is published. The

inscription, part of which is lost, was set up by the senate and people in honor of some one who had been kanephoros to Dionysos in the archonship of Seleukos, to the same god in the archonship of Herakleodoros, and also to the Mother of the gods. Seleukos occurs also in *C. I. A.*, II, 628, where Aischrion is also mentioned. Herakleodoros probably came after Seleukos, about Ol. 175.—S. A. KOUMANOUDES, *Inscriptions of Athens and Thisbe*. A facsimile is given of a stone found in the excavations at the Olympieion. The stone is a segment of a wheel which was adorned with radiating laurel-leaves, between which were round holes. Near the edge of the wheel is the inscription $\Sigma\Xi\tau\alpha\Delta\iota\Omega\text{N}\text{B}$ in characters of the last years of the Makedonian power. To what this measurement refers, is unknown. A similar inscription is published *Εφ. Αρχ.*, 1862, p. 146, pl. 18. An inscription from Thisbe is published, giving the name and titles of the Emperor Caracalla as honored by the senate and people of the Thisbeans.—A. S. KOUMANOUDES, *Dikasts' Tablets*. Three bronze dikasts' tablets are published in facsimile. Of these, two were found in tombs near Spata, the third N. E. from Athens.—CORRIGENDA.

HAROLD N. FOWLER.

GAZETTE ARCHÉOLOGIQUE. 1887. Nos. 5-6.—EUG. MÜNTZ, *Petrarch and Simone Martini* (Memmi) (pp. 99-107; pl. 13). The friendship between the great poet and the great Sieneſe painter is well known. A singular proof of it exists in the frontispiece of a manuscript of Vergil in the Ambrosian Library at Milan, reproduced on pl. 13, which is the result of the collaboration of the two friends. The ms. belonged to Petrarch, and he persuaded Simone to paint, at its beginning, a miniature representing, above, Vergil reclining under a tree, seeking inspiration while the commentator, Servius, is shown pointing him out to Aeneas; and, below, scenes symbolizing the other works of the poet—the *Georgica* and the *Eclogae*. The inscriptions are in the handwriting of Petrarch. M. Müntz also studies a fresco by Simone in the porch of Nôtre-Dame-des-Doms at Avignon, now destroyed, which contained a portrait of Laura.—E. POTTIER, *Unpublished painted vases of the Ravestein Museum at Brussels* (pp. 108-15; pls. 14-15). Among the vases given by M. de Meester de Ravestein to the Museum at Brussels are a number with artists' signatures hitherto unpublished: an amphora by Nikosthenes, found at Caere, belonging to the series with the dancing Seilenos and the $\chi\omega\pi\omicron\varsigma$; a cup by Hieron with Dionysiac scenes; a cup with the name of Leagros; another with that of Tleson—not the painter but a favorite of the v century; another, found near Caere, with the name of Panaitios, etc. M. Pottier also publishes (pl. 14, No. 1) an archaic vase with white ground, which belongs to an interesting small class of which the cup of Arkesilaos and that of Polyphemos blinded by Odysseus, both in the Louvre, are the best-known examples, and many of which

contain banquet-scenes.—G. BAPST, *The excavations of Sivierskaia* (Caucasus) (pp. 116–23; pl. 16). Among the most interesting of the many discoveries in Asiatic Russia, which have of late been disclosing unsuspected developments of Greek and Græco-Barbaric art, are those made in a tumulus at Sivierskaia, by the river Kouban, on the Black Sea, near Ekaterinodar. The tumulus was opened by some Cossacks in 1881, and the objects found were purchased for the Historical Museum of Moscow. The lower hemispherical tumulus is a Scythian *kourgane* accumulated at a far earlier date than the upper one, which is dated about 100 B. C. by two gold coins of Pairisades, king of the Bosphoros. The most important of the objects are: a glass *skyphos* with two handles, with a gold mounting and adorned with chains, carnelians and gold circlets (pl. 16); another glass *skyphos* with a simpler decoration (pl. 16) and the gold mounting of a third vase; a large gold plaque with a mythological subject of barbarous style in relief; two smaller plaques with griffins in *repoussé* relief. A long description of the circumstances of the discovery is quoted from the Director of the Museum, M. Sisoff; and M. Bapst then considers the various objects in detail, limiting himself, in this first paper, to the two glass cups with their remarkably rich decoration which are reproduced on pl. 16.—R. MOWAT, *A bronze figurine with horned helmet* (pp. 124–31; pl. 17). The figure is that of a bearded man with cuirass and helmet, whose raised right hand originally rested on a lance, and whose advanced and closed left hand doubtless held a parazonium. It is said to have been found near Bayonne, and is now in the Museum of St. Germain. It is evidently a portrait, and the writer is disposed to see in it the *Virtus Augusti* represented with the lineaments of Posthumius (258 A. D.). Singular are, the three bull-horns on the helmet, the Medusa-head on the pectoral, and the figure of the bull in high-relief on the lower part of the cuirass. The bull was the emblem of several Roman legions, and in this case the statuette was probably a votive offering of the *VIII Augusta*. The horns are the typical attribute of the national Gallic helmet (*cf.* Diodoros Sikelos, v. 30). Posthumius was saluted emperor in Gaul in 258.—S. REINACH, *Remarks on the Apotheosis of Homer, a marble basrelief in the British Museum* (pp. 132–37; pl. 18). This basrelief, found at Bovillae toward the middle of the XVII century, has been often published but always insufficiently. M. Reinach does not enter into all the questions raised by this work, but leaves aside the lower row—the Apotheosis proper—where the figures are all identified by inscriptions, to consider mainly the second and third rows of figures. The scene is Mt. Parnassos, at the summit of which Zeus reclines, while the Muses are below him. M. Reinach remarks that Greek art did not individualize the Muses, giving attributes and arts to each. This was begun only by Alexandrian art, and the tradition was

but slowly formed. In the figure usually called Melpomene, he sees Mnemosyne, the mother of the Muses, and in the so-called Pythia, the Muse Thalia. Instead of dating this work from the Roman period, M. Reinach considers it to be a work of the second century B. C. According to him, the inscription was engraved near Smyrna between 120 and 180 B. C.—M. PROU, *Two drawings of the XII century in the treasury of Saint-Étienne at Auxerre* (pp. 138–44; pls. 19, 20). The two line-drawings here described and reproduced evidently come from a missal of the first half of the XII century. In each there is a large central compartment surrounded by a large number of smaller ones. In one, the Crucifixion is in the centre, with scenes of the Passion and Resurrection around it. In the other, the Apocalyptic scene is reproduced, with Christ and the four Living-Creatures in the centre, and the 24 Elders around him.—A. DANICOURT, *Engraved stone representing a Gaul* (pp. 145–46). Description of a sardonyx engraved with a head and the inscription VIRIOV. The style is analogous to that of a number of Gallic coins, though it is the first time that an engraved stone of this style with portrait and name has been found. A relation is suggested with the chief Viridvoix mentioned in Caesar's *Commentaries*.

Nos. 7-8.—G. BAPST, *The excavations at Siverskaia* (cont.) (pp. 147–49; pls. 21, 22). Publication of a silver dish and a gold plaque. The dish is of silver gilt worked in *repoussé* with a delicate and tasteful decoration: a central rosette is surrounded by acanthus leaves from which springs, at intervals, a double volute which alternates with a female winged bust in forming the decoration of the portion between the rosette and the border, which consists of an egg-and-dart moulding. This patera from the Caucasus has no affinity with those found in Kypros, Assyria and Italy. Very different in style is the gold plaque (*phaleron*) in which a mythological scene is represented in *repoussé* in a most rude and barbarous style, much later in date than any other object in the collection, which should, with that exception, be attributed to talented Greek metal-workers.—L. COURAJOD, *New acquisitions of the department of sculpture and works of art of the Middle Ages and the Renaissance at the Museum of the Louvre* (pp. 150–61; pl. 23). Publication of a marble bust of Ferdinand I of Aragon, King of Naples, purchased in 1886 in Rome from the artist Simonetti. The realistic and powerful modelling points to the Lombardo-Venetian region, Naples or Sicily. In fact, it came from Naples. The figure is in the Italian costume of the middle and close of the xv cent. The eyes are hard, the mouth sensual, the nose clean-cut. M. C. identifies it as the portrait of Ferdinand I of Aragon (1458–94), by comparing it with two silver coins, two portraits in a ms. of the *Bib. Nat.* (*Fonds Latin*, 12947), one in a second ms. of the same library (*Fonds Latin*, 12946) and another in a Viennese ms. of Cicero, containing

an equestrian statue. M. C. also gives a short sketch of the North Italian artists who imported Renaissance art into the kingdom of Naples during the second half of the xv cent.—H. DE GEYMÜLLER, *Bramante and the restoration of Santa Maria delle Grazie at Milano* (pp. 162–77; pls. 24, 25). M. de G. publishes a drawing which, in his opinion, proves Bramante to be the architect of the Renaissance portion of the church of Santa Maria delle Grazie at Milano, and which he considers worthy of consideration in view of the contemplated restoration of that monument. The drawing is much retouched and incorrect in many details. Underneath are the remains of the original, by Bramante's own hand, restored on pl. 25. The drawing belongs to the *Accademia Raffaello* at Urbino. It indicates different stages in the artist's conception of the monument.—H. BAZIN, *The Roman Hercules and the Gallo-Roman Hercules* (pp. 178–81; pl. 26). Two bronzes of Hercules are published which were found at Vienne in 1866. The first represents not the *Dis pater* of the Gauls—the god with the hammer—but the Roman Hercules with lion-skin and skyphos, and is of great artistic merit. The second is stiff Gallie work, in which the god is dressed in the *sagum*, a jacket and tights!—A. CHOISY, *The excavations at Susa and ancient Persian Art* (pp. 182–97). This second paper M. Choisy devotes to an analysis of the results obtained by M. Dieulafoy in his study of Persian architecture as expressed in his work *L'Art Antique de la Perse*. This is done under the heads: vaulted constructions; constructions in stone and wood; the laws of proportion. M. Choisy accepts Dieulafoy's very questionable attribution of the palaces of Sarvistan and Firuzabad to the Achaimenidai instead of the Sassanidai, thus making them 800 or 900 years older than they have hitherto been considered to be. He also adopts his theory of the wooden origin of the Greek orders.—A. DE CHAMPEAUX and P. GAUCHERY, *Works of architecture and sculpture executed for Jean de France, duc de Berry* (pp. 198–202) (contin.). This paper treats of the palace and the Sainte Chapelle of Bourges. In 1371, the duke ordered the erection of a mortuary chapel in the Cathedral of Bourges. He also undertook to rebuild the old palace of the viscounts of Bourges. The palace was most imposing. It comprised three halls, one of which, the *grande salle*, was the largest in the kingdom, with the exception of the hall of the palace in Paris. He did not finish the work. Only a few vestiges now remain. The small old palace is now occupied by the *Pre-fecture*. The *Sainte Chapelle* of the palace was dedicated in 1405.

Nos. 9-10.—A. DE CHAMPEAUX and P. GAUCHERY, *Works of architecture and sculpture executed for Jean de France, duc de Berry* (contin.) (pp. 203–12; pl. 28). This paper treats, first, of the Sainte-Chapelle at Bourges, which was similar to that built at Champmol by the duke of Burgundy, Philippe-le-Hardi: it was larger than that of Paris, and was divided into five equal rectangular bays ending in an apse opening out of a regular

demi-hexagon. The sculptured and painted decorations were extremely rich, including thirteen superb painted windows, carved screen and stalls, the altar with its statues, etc. The duke made many additions to and accumulated many artistic treasures in the *Hôtel de Nesle* in Paris and his Château at Bicêtre.—M. SCHWEISTHAL, *The image of Niobe and the altar of Zeus Hypatos on Mount Sipylos* (pp. 213-32; pl. 29). Following Hermann's opinion, that the mountain gorge which divides the Sipylos and is called *Jarik-Kaia* is the ancient Acheloüs and that by following the torrent's course it would be possible to find the Niobe, Herr Schweisthal considers that he has discovered it in a natural rock-formation not far from the entrance to the *Jarik-Kaia*. It is seen not in silhouette but in relief, as was to be expected from the passage in Pausanias. It could be seen from the ancient road between Magnesia and Sardis.—P. DE NOLHAC, *Some illuminated mss. of the ancient Fonds Vatican* (pp. 233-37). Enumeration of some Vatican mss. with miniatures. A Greek ms. of Ptolemy (*Vat. gr.*, 1291) executed in 814 A. D. has miniatures in classic style. The interesting Latin mss. are as follows: 3198, 3199, 3203, 3207, 3209, 3211, 3219, 3220, 3225, 3240, 3242, 3247, 3251, 3255, 3272, 3286, 3295, 3297, 3305, 3330-31, 3332, 3335, 3337, 3340, 3344, 3348, 3365, 3336, 3373, 3376, 3406, 3416. Of especial importance are: 3330-3331, the 3rd and 4th decades of Livy transcribed by Poggio in 1453 and 1455; an illustrated Terence of the XII-XIII cent. (3305); a portrait of Petrarch (3198); the series of Latin poets written by the famous Pomponius Laetus, all illuminated by the same hand (3264, 3279, 3285, 3302), especially the last, a Silius Italicus.—E. REVILLOUT, *Statue of a dog in the Egyptian Museum of the Louvre* (pp. 238-44; pl. 31). The dog played an important part in the life, and also in the art of the Ancient Empire in Egypt, and is not met at a later date. It is an instance of the passion of the early Egyptians for the reproduction of domestic life. Lepsius' *Denkmäler* is examined for representations of dogs. The statue of a dog illustrated on pl. 31 is a recent acquisition of the Louvre and the only known example in Egyptian art.—E. MOLINIER, *The reliquary of the True Cross in the treasury of Gran* (pp. 245-49; pl. 32). An enumeration is given of reliquaries of the Cross in the form of paintings. To this important group of Byzantine reliquaries belongs that of the treasury of Gran. It is composed of plaques of gold and gilt silver nailed to a wooden background. The central part, which contains a cross surrounded by enamelled figures in three compartments, is enclosed in a border of delicate interlaced metal arabesque work, with some rather rude figures. It is probably a work of the XI century, and it is conjectured to have been carried off from Constantinople to Hungary in 1204.—S. REINACH, *The draped Venus of the Louvre* (pp. 250-62; pl. 30). This is a monograph on the so-called *Venus Genetrix* of the Louvre, accompanied

by a plate giving both a front and side view of the upper part of the figure. M. R. takes occasion to deny that the use of transparent drapery in Greek statuary denotes a late period. In 1873, Bernouilli gave a list of 39 replicas of this type: M. R. here gives a list of over seventy, of which 44 are of marble, 2 in relief, 4 of bronze, 16 of terracotta, and 4 engraved stones. It is an Attic type of the school of the fourth century.

Nos. 11-12.—A. HÉRON DE VILLEFOSSE, *Handle of a bronze amphora in the museum of the Louvre* (pp. 263-66; pl. 33). The Etruscan bronze handle here published is ornamented with a Gorgon of a period near to that of the primitive terror-striking type. The mouth is open, the tongue hanging, the hair in long ringlets falling over in front: the broad body is covered with serpent-scales and ends in two serpents which curl around to meet the vase. It was purchased in Italy by Baron Ch. Davillier, and its mate is in the Museum of Nîmes. M. de Clercq possesses in his collection a similar bronze handle of even finer style, found in Kilikia: this Gorgon's body is seen sideways, has four wings, and is covered by a short tunic, and reptiles with griffin-heads take the place of the serpents on the Louvre handle.—J. MARTHA, *Note on a terracotta Siren found at Vulci* (pp. 267-70; pl. 34). This terracotta is now in the *Cabinet des Médailles* (Bib. Nat.). It belongs to the first period of Hellenized Etruscan art, in the v century, is painted with the primitive simple coloring, and is of a style similar to early Greek terracottas. The upper part of the figure is that of a woman with wings added to the arms; the lower part, that of a bird. The different meanings attached to the Siren or the Harpy in antiquity are dwelt upon.—S. REINACH, *The draped Venus of the Louvre* (contin.) (pp. 271-85). The list of replicas is finished by the enumeration of 8 coins. The study of the replicas shows: (i) that the Paris statue gives an exact idea of the original; the restoration of the hand holding the apple is justified; the archaic head without *stephane* approximates the original: (ii) that a certain number of replicas are probably portraits: (iii) that it is not certain that, in the original, one of the breasts was uncovered. Of the four theories regarding the *Venus Genetrix*—that it is (1) a replica of the statue of Arkesilaos, (2) a replica of the Garden Aphrodite of Alkamenes, (3) a work of the Alexandrian period, (4) referable to an original by Praxiteles—M. Reinach adopts a fusion of opinions (2) and (4). The archaic character of the head indicates a fifth-century type, and this is supported by the numerous replicas among the Myrina terracottas. He says: "I recognize in it a type probably created by Alkamenes, reproduced, with modifications that we cannot specify, by Praxiteles, and then imitated both by the koroplasts of Asia Minor and by the artists of the Hellenistic and Graeco-Roman periods. M. R. recapitulates the career of Praxiteles and shows his relations to older masters.—L. COURAJOD, *Some bronze Sculp-*

tures of Filarete (pp. 286-90; pl. 39). A basrelief in the Ambras collection at Wien is described. The principal subject is a boxing-match between Odysseus and Iros, while four draped men (among them Antinous) and one woman (Penelope?) are spectators. It is framed by a portico in xv-century style. The style is the same as that of the panels of the doors of St. Peter by Filarete. On pl. 39 is reproduced a negro's head in bronze which served as a steam-blower—an invention of Filarete (at Venezia in the Correr Museum). The workmanship is primitive.—CH. DE LINAS, *The reliquary of Pepin of Aquitaine in the treasury of the Abbey of Conques in Rouergue* (contin.) (pp. 291-97; pls. 37, 38). The reliquary is in the shape of a rectangular coffer or edifice, with high gabled roof. On the front is the figure of Christ crucified, below whom are the Virgin and St. John, all executed in red *repoussé* gold; on the back is a decoration of arcades: on the roof are eagles in red gold; on the left end is a silver-gilt *repoussé* plaque with the figure of St. John: this and the apostle on the right end were taken from the reliquary of Begon. The reliquary was evidently made over, perhaps as late as the xvi cent.: there are enamels of various kinds and ages: the original is probably a French work. A number of ancient engraved stones (13) were used.—E. MÜNTZ, *Inedited frescos of the XIV century in the Chartreuse of Villeneuve* (Gard) (pp. 298-303; pls. 35, 36). These interesting frescos are published for the first time. They belong to a date slightly after the middle of the century. A short memoir on the subject by M. Brune, the author of the water-colors from which the plates were made, is given.—FROEHNER, *The marriage of Pan, terracotta of the Spitzer collection* (pp. 304-5; pl. 40). This terracotta, thus interpreted, represents a subject so rare that only one other monument (a bronze) reproduces it. Pan is dancing, holding Selene, while Eros is in front with a torch, and a goat dances attendance behind. [This seems to be among the worst forgeries yet published. ED.].—ED. FLOUËST, *The Gallic hammer-god* (pp. 306-12). This is an answer to a paper by M. Bazin in the preceding number on two statuettes of Hercules, in which he proves the existence of the large hammer with small radiating hammers behind the head of the figure.

A. L. FROTHINGHAM, JR.

JAHRBUCH D. K. DEUT. ARCHÄOLOGISCHEN INSTITUTS. Vol. II. 1887. No. 2.—M. MAYER, *Amazon-group* (pl. 7). A marble group in the Casino of the Villa Borghese is published and discussed. The group is somewhat less than half life-size, and represents a mounted Amazon riding over two prostrate opponents. In spite of the inferior workmanship, the group reminds us of the copies of the gift of Attalos to the Athenians, and appears to be a copy of part of that assembly of statues.—F. DÜMMLER, *Silver ornaments from Kypros* (pl. 8). In a grave in Polis-tis-Chrysokou

were found, together with various smaller objects and several vases, several fragments of what seems to have been a silver girdle. Some of the fragments and a reconstruction of the girdle are here published. The girdle consisted of rectangular plates of silver from which hung silver tassels. The plates are joined together with hinges and adorned with meanders and palmetto-patterns which form, as it were, a frame for sphinxes and a figure of a man or deity holding two animals in each hand. The arrangement of the figures is strictly heraldic. These ornaments show plainly the influence of Oriental art, but the girdle seems to be a Kyprian work of the latter part of the sixth century B. C.—F. HAUSER, *On the Tübingen Bronze*. This bronze was explained by v. Schwabe (*Jahrbuch*, 1886, p. 163 ff., pl. 9) as a charioteer, but certain flat places on the left arm, as well as the position of the arm, make it probable that the figure held a shield. The figure is here explained as a *hoplitodromos* in the act of turning in the *diaulos*. Four vase-paintings and a stater of Kyzikos are published in confirmation of this theory. The bronze may possibly be a copy of the statue of Epicharmos *ἀπαιτοδρομεῖν ἀσκήσαντος* by Kritios and Nesiotes.—E. LÖWY, *Two Reliefs in the Villa Albani* (3 figs.). A relief (No. 160) representing two large figures, one male and one female, and a smaller male figure, was called by Welcher and Kekulé (*Akad. Mus.*, No. 180) a sepulchral monument. It is here interpreted as a votive relief to Asklepios. A second relief (No. 147, Zoega, *Bassirilievi*, I, pl. 18, p. 72 ff.) represents a large female figure, with an oinochoe and a bowl, followed by three smaller figures. Zoega thought an offering to Asklepios was represented: the opinion is here advanced, that the figure with the libation corresponds to the figure often seen on other reliefs apparently offering the libation to a hero who stands opposite her. These reliefs are both of Attic origin. A third relief (from Epidauros) is published, which represents Asklepios and Hygieia seated, while a youth stands before them holding a bowl toward them in his right hand while his left hand holds his horse, beside which stands a boy.—H. HEYDEMANN, *Seilenos before Midas*. A short description of seven vase-paintings representing scenes of this myth is given. One of these, representing the capture of Seilenos (*Mus. Naz. in Naples*, No. 1851) is here published for the first time.—K. WERNICKE, *The Triton of Tanagra*. Three Tanagraean coins of the time of the Antonines represent a statue of Dionysos and a Triton. Wolters (*Arch. Ztg.*, 1885, p. 263 ff.) has shown that the Triton mentioned by Pausanias was not a work of art, but a preserved sea-monster. Pausanias says the Triton was headless, whereas the figure on the coins has a head. This is here explained by supposing that the legend of the Triton destroyed by the followers of Dionysos gives in symbolic form an account of the introduction of the worship of Dionysos and the abandoning of that of the

sea-god. In that case, the Triton on the coins would be an old symbol of Tanagra, not a representation of the marvel described by Pausanias.—F. KOEPP, *The Origin of high-relief among the Greeks*. High-relief was not developed by the Greeks from low-relief, but had a different origin. The earliest known high-reliefs are those of the metopes of Selinous. Metopes, however, were once openings between beams: in these openings statues were placed. Then the statues were hewn from the same block as their background which now filled the whole opening, and thus high-relief was developed from sculpture in the round. Pediment-figures and the sculpture of metopes are subject to nearly the same conditions; consequently, figures in the round were used before reliefs for the decoration of pediments. Ancient pediment-reliefs do not prove the contrary of this, for their dimensions are small and their material so poor as to preclude the use of sculpture in the round in the few cases in which such reliefs are known.—H. HEYDEMANN, *Hetaira Kallipygos*. A vase-painting of the Museo Nazionale (No. 2855) is published. Two youths are reclining upon a *kliné*, while before them stands an hetaira in nearly the posture of the so-called Aphrodite Kallipygos. This recalls the thirty-ninth Hetaira-epistle of Alkiphron. The so-called Aphrodite probably represents an hetaira. On a vase formerly in the Hope-collection (*Arch. Anz.*, 1849, p. 98 f.) a satyr is grouped with a bacchante standing in much the same posture as that of the hetaira upon the vase here published.—R. O. SCHMIDT, *On the Sarcophagus-relief in the Villa Albani, Zoega, Bass.*, i, 52. Upon this relief, which represents the marriage of Peleus and Thetis, a youth in Phrygian costume is represented carrying a torch and a jar. This figure is here explained as Ganymedes, with reference to Euripides, *Iph. Aul.*, 1040 ff.—BIBLIOGRAPHY.

No. 3.—A. CONZE, *Bronze Statuette of Hermes* (pl. 9). A statuette in the possession of Herr v. Radowitz, German ambassador at Constantinople, is published and discussed. The figure is about 25 centimetres high. Hermes stands resting his weight on his right leg. In his right hand he holds a ram's horn. In his left hand he probably held a caduceus. The eyeballs, lips, and nipples were of silver, but this had been broken away except from the eyes. The figure once wore a chlamys which was probably of silver, and was so arranged as to cover a large oblong hole in the back. The arms were cast separately and attached to the shoulders. This attractive figure is of late Greek workmanship. It was formerly in the possession of a Turk in Yemen, but its previous history is unknown.—FR. STUDNICZKA, *Antenor the Son of Eumares and the History of Archaic Painting*. I. *A Work of Antenor* (pl. 10; 13 cuts). An inscription upon a fragment of a pedestal found upon the Akropolis mentions Nearchos as dedicator and Antenor, son of Eumares, as artist. The inscription is published by Kabbadias (*Εφ. 'Αρχ.*, 1886, pl. 4, p. 81) and by Robert (*Hermes*, 1887, p. 129 ff.).

It is here given in facsimile. The pedestal is shown to have consisted of a foundation upon which stood an upright stele surmounted by a kymation and a flat plinth. Upon this stood a "Spes" figure of Parian marble, several fragments of which have been found. The execution is careful and elegant. The garment of the figure is adorned with maeander patterns and stars or rosettes of red and green. Robert thought the Nearchos mentioned was the vase-painter of that name. Several examples of dedications by vase-painters are discussed, and facsimiles of three inscriptions are given. It seems, however, that the offerings dedicated by them were their own works rather than statues. Besides, the only extant vase of Nearchos seems to belong to the first third of the sixth century, and the statue of Antenor with its inscription belongs to a later time, about 540 or 530. Antenor was, then, a well-known master when he made the group of Harmodios and Aristogeiton. His father Eumares was probably the painter whom Pliny 35.36 calls *Eumarium Atheniensem*.

II. *Pliny's Account of the Earliest Painters.* If Eumares was the father of Antenor, he must have flourished about the time of Solon. This agrees with the date assigned to him by Pliny. Pliny's account of early artists is not so worthless as Robert (*Archäologische Märchen*) thinks. Pliny probably derived his information indirectly from Polemon. Inventions are apparently ascribed by him to the earliest artists in whose extant works they are found. The earliest paintings he knew were Corinthian and Sikyonian, consequently Pliny (35.15) mentions Corinth and Sikyon as the places where painting was said to have been invented. In the same way the earliest use of red color is ascribed to Ekphantos of Corinth, after whom (35.56) Eumares is mentioned as the first who distinguished males from females in his paintings. The sudden rise in Athens of a style of painting similar to that practised in Corinth was probably due to immigration of artists or an artist from Corinth, and may be connected with the name of Eucheiros. About two generations after him is the time of Eumares. To this period the François vase belongs. Here females are white and males are black, and what Pliny says of Eumares, that he dared to imitate all forms, is true of the artists of the François vase and other vases of the same period.

III. *Kimon of Kleonai.* Robert (*Arch. Märch.* p. 128) thinks Kimon—of whom Pliny (35.56) says *in veste rugas et sinus invenit, and catagraphas invenit, hoc est imagines obliquas*—should be ascribed to the seventh century. But draping is first successfully drawn upon vases of the School of Epiktetos, and *catagraphas* may be explained as "projections," i. e., as improvements in linear perspective, which appear about the same time. The innovations of Kimon were probably effected by his personal presence in Athens. The most probable time for his immigration is the time of Peisistratos. He was, then, a contemporary of Antenor.

IV. *The Date of Vase-painting with Red Figures* (3 cuts). The beginning

of the use of red figures has lately been put about the year 500, but even this is too late. The fragments of pottery found on the Akropolis prove this by their style and their inscriptions. Upon vases with red, as well as those with black, figures, youths are called by names which belong almost certainly to well-known persons whose youth falls in the sixth century; e. g., Leagros, who is probably the general who fell in 467 B. C. The Hipparchos whose name occurs on two vases of Epiktetos and several others of about the same time is probably the son of Peisistratos. This confirms what has been said above about Kimon of Kleonai.—F. DÜMLER, *Attic Lekythos from Kypros. Remarks on the Chronology of Vases and the History of Painters* (pl. 11). An Attic lekythos from near the ancient Marion in Kypros is published. Attic wares were imported in Kypros until the insurrection of Onesilas in 498 B. C., but not after this until after the battle at Salamis in 449 B. C. This is natural on account of the hostility of Athens to the Persian masters of Kypros, and is substantiated by the vases found in Kyprian tombs. Between 449 and the time of Kimon, importation from Attica was not active. The discovery in Kyprian tombs of early Attic red-figured vases shows that such vases were made before 498 B. C. The lekythos here published is like other Attic sepulchral lekythoi in technique. The subject represented is an Amazon resting her foot on a stone and bending to tie her shoe or sandal. This *motif* occurs twice in the western frieze of the Parthenon. Other Amazon-vases are mentioned, some of which show greater or less resemblance to parts of the Parthenon. But it is not likely that vase-painters would in several cases have adapted parts of the Parthenon-frieze to represent Amazons. It is more likely that they derived their *motifs* from a painting of a battle of Amazons. So the vase-paintings representing Odysseus slaying the suitors are directly traceable to Polygnotos' painting at Plataiai, and the representations of the death of the children of Niobe may go back to the same original. There must also have been a famous original for the vase-paintings representing the embassy of the Greeks to Achilleus, and the *motifs* of these paintings point to the school of Polygnotos. Several of these vases also show traces of Thasian dialect or orthography. These vases belong to the time of Polygnotos himself or very little later, i. e., to about 470–450 B. C. A consequence of this is, that nearly all vases with purely Attic alphabet belong to the time before Polygnotos. Vases with red figures must then have been made for several decades in competition with black-figured vases. That these earlier vases show more freshness and talent is probably due to the fact that there was in those early times no sharp distinction between artists and artisans. Later the vase-painters imitated the works of great artists; but naturally chose paintings rather than sculptures. So the original of a vase-painting in the Museo Gregoriano is to be sought in a painting of the school of Polygnotos, not with

Winter (*Die Jüngerer Attischen Vasen*, p. 41) and Michaelis (*Der Parthenon*, p. 139) in two metopes of the Parthenon.—C. ROBERT, *Manes in the Berlin Museum*. A Manes is published in a cut, and a discussion of the *kottabos* follows. Helbig's article (*Mitth. d. röm. Inst.*, 1886, pp. 222, 234) is corrected and supplemented. In the first half of the fifth century the game with a disc of metal as represented in vase-paintings seems to have been most popular. At the time of Aristophanes and Antiphanes the game with the Manes seems to have prevailed. Perhaps a real slave originally held up the object at which the wine was thrown, and was only later supplanted by the bronze Manes set on the top of the *kottabos*-stick.—K. SITTIL, *The Hesiodic Shield of Herakles*. The Hesiodic description of the shield of Herakles is shown by its style and by detailed comparison with extant works of early art to be a description of a shield which the poet actually saw. Such highly ornamented shields may have been made for the adornment of temples or palaces. The description of the shield must belong to a time not long after the eighth century. The shield was a product of Boiotian art. In the poem only lines 149-153, 157-159, 255-257 and 261-263 are interpolated.—C. BELGER, *On the Bronze Statue of a Boxer in Rome*. The boxer represented by this statue (*Antike Denkmäler*, 1887, pl. 4) is not speaking, but his mouth is opened because his nose has been so crushed that he has to breathe through his mouth.—J. C. MORGENTHAU, *Athena and Marsyas*. The vase described by Lüders in the *Bullettino dell' Inst.*, 1873, p. 169 is identified with a *kantharos* in the Metropolitan Museum in New York. The vase is described, and a cut is given of the part of its adornment which represents Athena and Marsyas.—REPORTS. *Acquisitions of the British Museum in the year 1886*. Extract from A. S. Murray's report to Parliament.—ACQUISITIONS OF THE ROYAL MUSEUMS AT BERLIN IN THE YEAR 1886. I. O. PUCHSTEIN, *Collection of Graeco-Roman sculptures and casts*. Seven originals and twelve casts are recorded. Besides these some objects from Pergamon reached the museum, but no further report upon them is made. II. A. FURTWÄGLER, *The Antiquarium*. *a. Terracottas* (six cuts). These comprise eight numbers; but under some of the numbers several figures are grouped together. *b. Bronzes* (two cuts). 1 is a relief of Venus Victrix, 2 is a Gorgoneion, 3 is an archaic statuette of Artemis from Dodona, 4 is a letter Y from the gate of Adalia. *c. Vases* (one cut). 1 is a vase in the form of a couchant ram, 2 is a small Mykenian jug with handles. *d. Miscellaneous*. 1, a gold ring. 2, a jug of dark violet and white glass. 3, eight ox-heads of lead; from southern Russia.—BIBLIOGRAPHY.

No. 4.—J. BÖHLAU, *A Melian Amphora* (pl. 12; and cut). An amphora in Athens is published. The form and decoration agree with those of the vases called Melian by Conze, but show a later development. The Melian

vase-painters seem to have copied the Rhodians.—FR. WINTER, *The early art of Attika* (pls. 13, 14; and ten cuts). The pls. publish the archaic female heads from the Akropolis already published in *The Museums of Athens*, pls. 13, 14; and in 'Εφ. 'Αρχ., 1883, pl. 6. The later of the two belongs to a statue dedicated by Euthydikos son of Thaliarchos. The inscription is given in facsimile. Part of the painting of the clothing of this figure is preserved, the forms of which, especially the horses, show clearly an early stage of genuine Attic art. Both heads are clearly Attic, not Nesiotic, as is shown by their proportions. The proportions adopted by various schools of art are discussed. The great rise of Attic art is attributed to the time of Peisistratos. To this time is also attributed the rise of the red-figured style of vase-painting. Fragments of a red-figured vase from the older pre-Persian strata about the Parthenon are published and ascribed to the time of Peisistratos. The style of the fragments is that of Douris.—F. v. DUHN, *Charon-lekythoi* (*Ant. Denkm.*, I, pl. 23). Three lekythoi with representations of Charon and his boat are described.—C. ROBERT, *The Interpretation of the Telephos-frieze from Pergamon* (7 cuts). I. The author's previous opinion (*Bild und Lied*, p. 47 f.) that the *Auge* and the *Telephos* of Euripides and the *Mysians* of Sophokles were the literary sources of the version of the myth depicted in this frieze, is maintained by comparison of individual scenes, representing the punishment of Auge, Telephos and Auge in the bridal-chamber, and Telephos with the infant Orestes. II. The scenes of the frieze belong to the childhood, youth, and manhood of Telephos. The following scenes from the manhood of Telephos are recognized in the relief: (1) the wounding of Telephos; (2) the healing by the spear of Achilleus; (3) Hiera the wife of Telephos in battle; (4) the death of the brothers Heloros and Aktaios at the hands of Aias. The last two scenes belong to the official Pergamene version of the story (cf. Philostrat., II, 15, p. 299; II, 17, p. 299; ed. Kayser).—A. GERCKE, *Apollon the Conqueror of the Gauls*. All representations of Apollon as conqueror of the Gauls show the god with bow and quiver. The Apollon of the Belvedere forms no exception, and should not be restored to agree with the Stroganoff bronze.—FR. KOEPP, *Giants in armor*. Down to a comparatively late period, the giants in conflict with the gods are represented in art as wearing armor. All writers invariably (the exceptions are only apparent) describe them as clothed in skins and fighting with clubs and stones. The vase-paintings had no distinct version of the myth, but borrowed for the representation of this combat the types in use for human and heroic conflicts.—E. KUHNERT, *A new Leukippides-vase*. The vase (*Jahrb.* I, pl. 10, 2) which Graf interprets as Peleus and Thetis is here referred to the rape of the Leukippides by the Dioskouroi. Pausanias (I. 18. 1) mentions a painting by Polygnotos which represented this subject.—G. LOESCHKE, *An*

Archaic Niobid-vase (*Ant. Denkm.*, i, pl. 22). This vase belongs to the class formerly called "Tyrrhenian" (*cf.* Furtwängler, *Catal.* 1704). Besides the chief picture, this vase is adorned with figures of four horsemen. Perhaps the horses have here the same meaning as upon sepulchral monuments. The chief picture represents the death of the children of Niobe. Only two children, and these both full-grown, are represented. The composition is similar to that of the Tityos vase in the Louvre (*Mon. d. I.*, 1856, pl. x, 1; Pottier in Dumont's *Ceramiques de la Grèce propre*, p. 326). The types of both scenes must have the same origin.—FR. STUDNICZKA, *Addendum to p. 135 ff.* Various corrections and additions to the article on Antenor the son of Eumares; see above.—BIBLIOGRAPHY.—INDEX.

Vol. III. 1888. No. 1.—A. SENZ, *The Monument of the Julii at St. Remy* (*Ant. Denkm.*, pls. 13, 14, 15; and 7 cuts). This monument stands by the roadside not far from St. Remy: beside it is a triumphal arch. The foundation stands upon several steps: at each corner is a pillar with an Ionic capital: between these columns are reliefs. Upon this foundation is the chief story of the building. On each side is an opening formed by two piers and an arch above them: at each corner is a column with Attic base, 15 flutes, and Corinthian capital. Above is a second frieze and a cornice. Above this is a round temple with ten Corinthian columns supporting a conical roof. The building is described, as are also the remains of ancient walls found in the neighborhood.—E. HÜBNER, *The Sculptures of the Monument of the Julii at St. Remy* (*Ant. Denkm.*, i, pls. 16, 17). The monument was erected in the time of Julius (or possibly Augustus) Caesar by Sextus Julius, Lucius Julius, and Marcus Julius in honor of their parents, Gaius Julius and his wife. These Julii were probably Gauls who were admitted to Roman citizenship by Julius Caesar. The four large reliefs on the foundation represent scenes of combat. On the N. E. side is a cavalry-battle, on the S. W. side a boar-hunt, on the S. E. a combat in which an Amazon is taken captive, and on the N. W. a battle of Roman legionaries. These are probably all scenes from the life of the deceased Gaius Julius. The Amazon may represent a Keltic princess or may be intended to show that Gaius Julius followed in the Roman armies to Asia. The figures are in general more or less heroized. Individual *motifs* are clearly derived from Greek, or later Hellenistic, originals. The composition is throughout clear, though some of the figures cannot be interpreted with certainty, owing in part to the ravages of time. These reliefs are all described in detail. The four small reliefs above the arches represent Tritons and sea-monsters. On each side is a *clipeus* held over the middle as if to receive an inscription. The Tritons, as well as the oars which recur on each side, may indicate that the Julii were active in supporting the naval and commercial interests of Glanum Livii, now St. Remy. Over each arch is a Gorgoneion. The in-

scription is on the N. E. side.—R. KÉKULÉ, *On a Statue in the Glyptothek in Munich* (pl. 1). A statue representing a bearded male figure is published (Ulrichs, *Glyptothek*, p. 61, No. 15 = Friederichs-Wolters, No. 480). The arms are wrongly restored. The right hand holds a sword, and the left a scabbard. The position of the arms should be more natural, and the figure should be restored as Zeus with a thunderbolt in his right hand, and an eagle upon his left hand. A cut gives three coins in illustration of this type. The Munich figure is a copy of a bronze original of the fifth century B. C., and shows a strong influence of Polykleitos.—C. ROBERT, *The Interpretation of the Telephos-frieze from Pergamon* (12 cuts). III. Besides Telephos and Auge in the bridal-chamber (see above) the following scenes from the youth of Telephos are recognized in the fragments of the frieze: (1) the marriage of Auge and Telephos, which was directly connected with the scene in the bridal-chamber; (2) the landing of Telephos and Parthenopaios; (3) Telephos and Parthenopaios coming before King Teuthras; (4) Auge bringing Telephos his weapons; (5) the departure of Telephos for the combat with Idas. IV. The childhood of Telephos is also represented by several scenes: (1) the birth of Telephos; (2) his exposure upon Mount Parthenion; (3) the punishment of Auge, who is sent to sea in a chest; (4) her reception by King Teuthras; (5) the discovery of the infant Telephos by his father Herakles. These scenes are preceded by scenes representing the meeting of Herakles with Auge, and the questioning of the oracle by King Aleos. This is probably the occasion upon which Aleos is told that his sons are to be slain by the son of Auge. This part of the myth was treated in the *Aleadaí* of Sophokles, to which a short discussion is devoted.—FR. WINTER, *Thetis-vase of Euphronios* (pl. 2). Fragments of a red-figured vase from the Akropolis are published. The scene represented is Peleus leading Thetis to his chariot. Thetis has an inscription. The style of the painting is that of the Sosias vase (Furtw., *Catal.*, No. 2278; *Ant. Denkm.*, I, 1886, pls. 9, 10). This is also the style of Euphronios, and the inscription $\omega\varsigma \epsilon\gamma\omega$ should probably be read $\epsilon\upsilon\phi\rho\acute{o}\nu\iota\omega\varsigma \epsilon\gamma\omega$ [$\alpha\phi\sigma\epsilon\iota$].—O. KERN, *On the two Reliefs representing the Peliades* (2 cuts). One of the chief arguments for the genuineness of the Berlin relief is Hirt's remark (in Boettiger's *Amalthea*, p. 161) that the relief in the Lateran was discovered in 1814. As the Berlin relief is not a work of this century, it could not have been copied from the Lateran relief. Two drawings here published show that the Lateran relief was known before 1814. One is from the Pozzo collection in the library at Winsor castle, and belongs to the seventeenth century; the other, which is the property of A. W. Franks in London, is from the collection sold by Cardinal Albani to George III, and belongs to the first half of the eighteenth century. The Berlin relief may, then, be a copy of the Lateran relief, and its peculiarities are best

explained on this hypothesis.—A. FURTWÄNGLER, *An Eros and Psyche Gem*. The gem published by Wolters in the *Arch. Ztg.* (1884, p. 17f) is shown to be the work of one of the Pichler family, probably Giovanni. A copy in Berlin bears the signature of Luigi Pichler. The design is said to be from a painting of Albani.—BIBLIOGRAPHY. HAROLD N. FOWLER.

MITTHEILUNGEN DES K. DEUTSCHEN ARCHÄOLOGISCHEN INSTITUTS. ATHENISCHE ABTHEILUNG. Vol. XII. Nos. 1 and 2.—F. DÜMMLER and FR. STUDNICZKA, *On the Origin of the Civilization of Mykenai*. Dümmler accepts as a certain fact, that the civilization of Mykenai followed directly upon that of the Islands, and was in turn superseded by that of the Dipylon-vases. It is, then, impossible that the civilization of Mykenai is Achaian, for we cannot suppose that, after reaching the point of culture attained by the race best known at Mykenai, the inhabitants went back to the point of the Dipylon-vases, for this change cannot be the result of the Dorian invasion, inasmuch as the Dorians did not obtain a footing in Attika, and yet the Dipylon style supplanted the other in Attika as in Argolis. The Dipylon style must be Achaian, *i. e.*, Hellenic, consequently that of Mykenai is non-Hellenic, and Dümmler maintains that it is Karian. This would account for the discrepancies between the burial-customs which prevailed among the people to whom Mykenai has given a name and those described in the Homeric poems; it also explains the gulf between the civilization of Mykenai and all we know of that of the early Greeks. Studniczka shows that the fibula was a necessary part of the costume of the pre-Dorian Greeks, but that it is altogether wanting among the remains of the Mykenaian civilization: it is also wanting among Oriental nations. The so-called Doric costume was originally common to all the Greeks: that the Mykenaians wore an Oriental costume, is proved by the absence of fibulae as well as by scraps of linen found in the graves of Mykenai. The Mykenaian civilization, then, was derived from the Orient, and was probably Karian, though other eastern peoples doubtless exerted much influence upon it. Four cuts illustrate the text.—W. DÖRRFELD, *The Ancient Temple of Athena on the Akropolis*. II. *History of the Building* (pl. 1). When a temple of Athena on the Akropolis before the Persian wars is mentioned, the newly-discovered temple (*Mith.*, XI, p. 337) is meant. Beside this was the temple of Erechtheus, in which was also an ancient statue of Athena. The Persians destroyed the temple of Athena, as far as possible, but probably left the walls standing. When the Athenians returned, they restored the temple, but did not rebuild the peristyle, since they had already determined to build a new temple (the Parthenon). The inscriptions of the fifth century B. C. and the passages in ancient writers which mention the "ancient temple of Athena" or the *opisthodomos*, are all to be

applied to this temple, in the opisthodomos of which was the State-treasury. This temple was, then, burnt in 406 B. C. (Xen., *Hell.*, I. 6). The inscription C.I.A., II, 829 records the rebuilding of a burnt temple near the Pandaroseion; therefore the temple under consideration was restored. Other inscriptions of later date mention the "ancient temple of Athena," proving that this temple continued to exist. Pausanias (I. 24.3) probably described this temple in some words which have been lost: the temple existed, then, at the time of Pausanias. Pl. 1 gives a plan of the Akropolis with the route of Pausanias.—E. PETERSEN, *The Ancient Temple of Athena on the Akropolis*. The writer opposes nearly every statement of the preceding article, and shows, by reference to ancient authors and inscriptions, that the old temple was not permanently restored after the Persian wars, and did not exist alongside of the Parthenon.—P. WOLTERS, *Two Thessalian Sepulchral Stelai* (2 figs.). Two stelai in the local museum at Larisa are published and discussed. Both are adorned with figures in low-relief. One represents a youth holding a hare, the other a maiden with a rabbit. Color was doubtless employed, but no traces of it remain. These stelai probably belong to about the middle of the fifth century B. C.: the style of their work is archaic and of a noble simplicity, and they are a welcome addition to the short list of Thessalian works of art.—A. MILCHHÖFER, *Report on Antiquities in Attika* (pls. 2, 3). A list is given of antiquities in that part of Attika which lies to the East of Mt. Hymettos. It comprises 142 numbers, mostly inscriptions, votive reliefs, and sepulchral monuments. Nos. 130, 131 are published.—FR. WINTER, *Sepulchral Monuments from Lamptrai* (No. 130 in Milchhöfer's list: 2 figs. and pl. 2). The front of this stone has in very low relief the figure of a young man on horseback. He carries shield and spear, and leads a second horse. On one end of the stone is the figure of an elderly man leaning on a staff, while the other end is occupied by two female figures tearing their hair in grief. Above the reliefs the stone spreads out like a capital, and is here adorned with a kyma, and above this with rosettes. This ornamentation appears to be of Egyptian origin. Something seems to have been on top of this stone, and Winter suggests a crouching sphinx. The stone was probably raised upon steps. The style of the relief is very primitive, not unlike that of the François-vase, and seems to belong to the middle of the sixth century B. C., before the art of Attika was influenced by artists coming from the Islands. The relief was certainly colored, though no traces of color remain.—E. REISCH, *Herakles-relief from Lamptrai* (No. 132 in Milchhöfer's list: pl. 3). This relief is graven upon a pedestal of Parian marble of which only about two-thirds appear to be wanting, and represents Herakles throttling a lion. Herakles has thrown himself upon the lion and presses him to the ground, holding his neck firmly clasped with both arms. The lion's left hind-paw is upon the hero's head. The relief

described by Winter is little more than an outline drawing, whereas here the ground is all evenly worked away, and the muscles are slightly indicated, while in Winter's relief they are not. It would seem, then, that the Herakles-relief is slightly less ancient than the other—probably a work of about 520 B. C., when the artists from Paros and elsewhere had already given a new impulse to Attic art. This view is further confirmed by comparison of the *motifs* of this relief with those of other works of art. A terracotta relief from the Akropolis is also published. The representation is similar to that above described, except in some details.—A. STSCHOUKAREFF, *An Inedited Attic Catalogus Judicialis*. An inscription in the Erechtheion is published. It has 83 lines, but only from two to five letters on each line are preserved. These suffice to show that this inscription is a list of law-cases like those published in *C. I. A.*, II, 2, Nos. 945–47, and that it belongs to the same year as No. 994, i. e., 383–82 B. C., the archonship of Phanostratos.—H. G. LOLLING and P. WOLTERS, *The Dome-Sepulchre at Dimini*. II. In this sepulchre have been found a number of objects besides those mentioned in *Mitth.* XI, p. 435 f. The newly-found objects are a number of gold ornaments and objects of glass and one rosette of bone. The condition of the clay floor of the tomb makes it improbable that bodies were burned there.—H. G. LOLLING, *The Dome-Sepulchre at Menidi*. A new search has resulted in the discovery of a number of objects of gold, silver, bronze, and glass.—MISCELLANIES. E. ROHDE, *The Sepulchral Inscription of Larisa* (*Mitth.*, XI, p. 451). For οὐδὲν γὰρ πᾶσιν ἐστί, line 8, we should read οὐδὲν γὰρ πλεῖν ἐστί, where πλεῖν = πλεόν.—DISCOVERIES and LITERATURE.—REPORTS OF MEETINGS. HAROLD N. FOWLER.

REVUE ARCHÉOLOGIQUE. 1887. July-Aug.—PH. BERGER, *The sarcophagus of Tabnith, King of Sidon* (pls. XI, XII). The Phoenician inscription on this sarcophagus is here published, transliterated and translated by Renan, showing that the sarcophagus contained the remains of Tabnith, king of Sidon, son of Eshmūnazar. The Egyptian hieroglyphic inscription is published by Maspéro, and the sarcophagus thought to have originally belonged to one of a family of Egyptian generals in the early Ptolemaic period, or even fifty years earlier (see *News*, III. 432). Berger discusses the historical evidence, and places Tabnith not earlier than 350 B. C., nor later than 275 B. C.—VERNAZ, *Notes on the excavations at Carthage, 1884–1885* (pl. XIII). In answer to the question whether the cisterns of Bordj-Djedid were supplied in the Roman period by the aqueduct of Carthage, recent excavations prove that they were not. An interesting subterranean aqueduct, feeding other cisterns which regulated the water-supply, has been partially explored. Near the cisterns of Bordj-Djedid is a system of drainage formed of nine branching conduits (opening into a

single canal leading toward the south) which follow the lines of streets above, as shown by remains. There seems to be no connection between the cisterns and these conduits. Another aqueduct was found, which received the overflow of these cisterns, posterior in construction to the drainage system. Further excavation is necessary before this drainage system is thoroughly understood.—A. VERCOUTRE, *The nekropolis of Sfax and burial in jars*. Excavations to the north of Sfax have revealed a form of burial in earthen jars (see *News*, III, 420).—HIPPOLYTE BAZIN, *The Amphitheatre of Lugudunum*. Professor Lafon of Lyon discovered in his garden, last March, walls of Roman construction. Further excavation revealed the existence of the amphitheatre of Lugudunum. Portions of the outer wall, the vaults and the podium have been uncovered. The long diameter measures about 135 met., the short diameter 108 m. and the circumference 333 met.—DELOCHE, *Studies on some seals and rings of the Merovingian period* (cont.). XLIII. Ring with the name of a man and of his wife from Vitry-le-François (Marne). The inscriptions engraved upon two ovals are read BAYBVLVVS-HARICVFA or HARICVBA. XLIV. Another ring with two names from Mulsanne (Sarthe). A gold ring found in 1852, now in the collection of Baron Pichon. On the quadrangular bezel is figured a warrior in the presence of a Gallic prophetess. On the sides of the bezel are inscribed the names DROMACIVS-BETTA. Like the other, this is supposed to be an engagement or marriage ring.—PH. HOMOLLE, *Iomilkas and Iechomelekh*. Iomilkas or Iomilkos, frequently mentioned in the inventories of Delian temples, is not to be identified with Iechomelekh, king of Byblos, but with the Carthaginian ambassador ΟΔΜΙΑΚΑΣ (*C. I. A.*, II, 235), as is proven by a new Delian inscription.—AUG. PROST, *The ancient Christian sarcophagi of Gaul* (cont.). The subjects treated in the decoration of the Christian sarcophagi of Gaul are usually of an allegorical or symbolic character. Noah and the ark, Daniel in the lion's den, David and Goliath are allegorical images of divine assistance; the Good Shepherd, of the divine care and pity; Peter with the keys, of the power of the Church, etc. The anchor, the fish, the dove, etc., are symbolic emblems of salvation, of Christ, of purity, etc. While the subjects are usually taken from the Old and New Testaments, the mode of decoration in the Christian monuments of the first centuries is derived from pagan sources.—NÉROUTSOS-BEY, *Greek and Latin inscriptions collected in and about Alexandria* (cont.). Twelve Ptolemaic inscriptions from funerary urns from Eleusis (Khádras) are here published. Many of these have been already published in *A. J. A.* I, pp. 21-27. Two mural inscriptions from a rock-cut tomb at Nikopolis bewail the loss of a young man and a young girl.—SALOMON REINACH, *Chronique d'Orient*. Summaries of the news from Athens, Thorikos, Ikaria, Eleusis, Laurion, Marathon, Eretria, Oropos,

Mykenai, Tiryns, Larissa, Bardarion, Olympia, Volo, Philippopoli, Amorgos, Skyros, Thasos, Kalymnos, Karpathos, Rhodos, Delos, Tenos, Krete, Konstantinople, Kypros, Smyrna, Assarlik, Assim, Kolophon, the Troad, Eolis, Lydia, Magnesia, Aidin, Sidon and Egypt (see *News* in JOURNAL).

—**MISCELLANIES.** *Monthly Bulletin of the Academy of Inscriptions.*—*News and Correspondence.*—*Bibliography.*

Sept.-Oct.—J. DE WITTE, *The triumphal arch of Orange.* New evidence is adduced, especially from coins, to prove that this arch was erected to celebrate the victory of Domitius Ahenobarbus and Fabius Maximus, in 121 B. C., over the Arverni and Allobrogi at Vindalium near the confluence of the Isère and Rhône.—J. HAMDY, *Note on a royal nekropolis discovered at Saïda.* A description with plans of the royal nekropolis at Sidon, showing the difficulties of the recovery of the sarcophagus of Tabnith.—VERNAZ, *Note on the excavations at Carthage, 1884-1885* (cont.). Near the cisterns of Bordj-Djedid, on either side of the aqueduct have been found the remains of a Punic nekropolis. The tombs are of two kinds, (1) rectangular chambers open at the side, (2) chambers closed by a flat stone on top. The vases found in these tombs are mainly Phoenician, a few Greek. The tombs are oriented towards Tyre. These discoveries, together with those of M. Gouvet and Père Delattre, and MM. Reinach and Babelon, indicate that the earliest settlement of Carthage was in the plain immediately to the south of Bordj-Djedid. Near the cisterns lies a pile of ruins, which have been interpreted as a theatre, gymnasium, basilica, etc. Fragments of an inscription discovered here prove it to be the remains of the baths erected or restored by Antoninus.—R. CAGNAT, *Note on the inscription of the baths at Carthage.* The inscription found by M. Vernaz in the ruins of the baths of Carthage is restored to read: [E]x permissu [domini nostri] optimi maxime principis Imp(eratoris) Cæs(aris) T. Aelii Hadria[ni Antonini A]ug(usti) Pii [Ge]rmanici Dacici [po]ntificis maximi, co(n)s(ulis) IIII, t[ri]buniciae potesta[tis . . .] I, p(atris) p(atris) pro[co(n)s(ulis)] et M. Aelii [Aurelii Veri Cæs(aris)] ceterorumque liberorum [ejus] sui (or bui) futuram therma . . . [circu]m marm[oribus]—A. VERCOUTRE, *The nekropolis of Sfax and burial in jars* (cont.). Further excavation has brought to light remains of tombs containing Christian inscriptions upon mosaics and marble slabs. Thirteen are here published. The Christian emblem ☩ upon a sepulchral jar and the inscription SPES IN DEO upon a disk used to close one of these jars prove that this form of burial prevailed even in Christian times. The mode of burial appears to have been Phoenician, similar burial-jars having been discovered in Lower Chaldaea, the isthmus of Suez, and in southern Gaul.—AUG. PROST, *The ancient Christian sarcophagi of Gaul* (cont.). The treatment of the orante upon Christian sarcophagi is considered at some length.

This is followed by a notice of the works and publications of M. Edm. Le Blant.—NÉROUTSOS-BEY, *Greek and Latin inscriptions found in and about Alexandria*. Ten Latin and Greek inscriptions from the ruins of the camp of the Cæsars at Ramleh, a Ptolemaic and a Roman inscription from Mandārah, and a Ptolemaic inscription from Aboukir, are here published.—JACQUES GUILLEMAUD, *Gallie inscriptions. New attempt at interpretation* (cont.). The inscription of Voltino (*Corp. Insc. Ital.*, No. 13) is read *Tetumus Sexti dugiava Sas-sadis tomelecati obvallu nutinu*, and translated, "Tetumus, son of Sextus, made a dam against the torrent of the cascade after an inundation which ravaged the entire valley."—TH. REINACH, *Coins on the Calendar* (pl. XIV). From four Syro-Makedonian coins, inscribed with the month II (13) indicative of an intercalary year, it appears that the years 75-74 B. C., 27-26 B. C., 5-6 A. D. and 78-79 A. D., were intercalary years; a result at variance with all the systems thus far proposed for reconstructing the ancient calendar.—MISCELLANIES. *Monthly Bulletin of the Academy of Inscriptions*.—*National Society of the Antiquaries of France*.—*News and Correspondence*.—*Bibliography*, containing a notice of the third and fourth volumes of PERROT et CHIPPIEZ's *Hist. de l'Art dans l'Antiquité*; CAMILLE JULLIAN's, *Inscriptions romaines de Bordeaux*; and BOUCHER DE MOLANDON and ADELBERT DE BEAUCORPS' *Le Tumulus de Reuilly* (pl. xv-xvi).

Nov.-Dec.—A. HÉRON DE VILLEFOSSE, *Newly discovered fragments of the frieze at the temple of Magnesia on the Maiandros* (pls. xvii-xviii). A large part of the frieze was brought to the Louvre by Texier in 1843. In July, 1887, five further reliefs were uncovered by some Turkish workmen and when Carl Humann and Baltazzi Bey arrived they unearthed six others, thus adding eleven to those already known. They represent another part of the same subject, combats of Greeks and Amazons.—LÉON HEUZEY, *The mace and the Assyrian Capital*. The stone age in Babylonia appears to have been prolonged well into the metal age: this is shown, *e. g.*, by a number of stone hammer or mallet heads and spheroids of different shapes, a number of which have archaic inscriptions. These are compared by M. H. to the maces given to certain chiefs in Assyrian battle-scenes, and to those held as royal insignia by the kings, and represented on Babylonian cylinders either as the appendage to some divinity or as an emblem adored along with others, like the battle-axe, the planets, *etc.* M. H. believes that, when used as a fetish, the mace head continued to be of stone, following tradition. It is suggested that the Assyrian spheroid capital may have been derived from them [the cylinder from Telloh adduced to prove this appears to have two vases placed on the top of poles, and *not maces*].—F. P. REVELLAT, *The tumular inscription of a flamen, etc.* It is proposed to give a slightly different reading of the inscription of a priestess of the goddess Aethucolis: . . a C(aii)f(ilia),

Carina[*flam*]inica sacer[*dotii*] *Aethucolis* [test]amento f(ieri)j(ussit).—A. HÉRON DE VILLEFOSSE, *Inscriptions from Morocco and Tunisia* (pl. XIX). (1) Only a few inscriptions are known which mention the province of Mauretania Tingitana: one is here published, commemorating the raising of a statue by the *populus Tingitanus*, perhaps to a governor; period, end of second or beg. of third cent.: *provinciae no[vae hisp.] ulterioris. Tin[gitanæ] populus Ti[ngitanus] statuam sua imp[ensa. p. p.]*. Tingitana was probably attached to ulterior Spain by Marcus Aurelius in 172, hence the epithet *nova*. (2) Two inscriptions of proconsuls of Africa, from Carthage, i. e., Maecilius Hilarianus (324) and Sextius Rusticus Julianus (371-73). (3) Some inscriptions, from Carthage, of *liberti* and *servi* of the Emperors.—DELOCHE, *Studies on some seals and rings of the Merovingian period* (contin.). XLV. Gold episcopal ring belonging to Alfred Danicourt. XLVI. Copper seal-ring with the inscription *Launoberga*.—J. GUILLEMAUD, *Gallic inscriptions. A new attempt at interpretation* (contin.). After strengthening his assertions regarding the Voltino inscriptions, the writer reads a Gallic inscription on a silver (votive) plaque at Verona: "To the Prince, the Tikoremians, (his) affectionate and obedient servants."—P. DE NOLHAC, *Nicolas Audebert, the Orleanese archaeologist*. There is a well-known account of a sojourn made in Italy, between 1574 and 1578, by a Frenchman who is here shown to be Nicolas Audebert.—H. BAZIN, *A Roman geographical monument at Antibes*. The writer conjectures that the lintel found near Antibes, on the ancient Via Aurelia, with the inscription *Audi viator si libet intus veni; tabula est aena, quae te cuncta perdocet* belongs to a small structure which contained a bronze tablet on which were recorded geographical data useful to travellers at this point, whence three Roman roads diverged.—M. SCHWAB, *A basrelief of the Renaissance*.—P. MONCEAUX, *Critical note on the chronology of the works of Apuleius*.—S. REINACH, *Chronique of the East*. 1888, Jan.-Feb.—S. REINACH, *The Hermes of Praxiteles* (pl. 1). A heliogravure from the original of this famous group of Hermes and Dionysos is here given for the first time. The writer sees in this work an allegorical personification—a practise very common in the early-IV cent. Hermes represents Arkadia, Dionysos typifies Elis, and the group symbolizes the happy union between Arkadia and Elis. Historically, this explanation is most satisfactory: the work would have been executed to celebrate the peace proclaimed in 363 between the Arkadians and the Eleans after their bloody contests of which Olympia itself was the scene; and may have been ordered by the mediators, the Mantineans.—E. RENAN, *A Phoenician and Greek inscription discovered at the Peiræus* (pls. II, III). The text and translation of this inscription have been given on p. 98.—EUGÈNE MÜNTZ, *The Antipope Clement VII: Essay on the history of the Fine Arts at Avignon at the close of the XIV cent.* (pl. IV). It is proved that art did not cease at

Avignon when the papacy returned to Rome, but that two anti-popes, Clement VII and Benedict XIII, continued to patronize the Fine Arts. This paper makes known, from the secret archives of the Vatican, the phalanx of architects, sculptors, painters, metal-workers, and embroiderers, grouped around Clement VII, who became pope in 1378 and died in 1394.—S. REINACH, *Statuette of a Gallic woman in the British Museum* (pl. v). This is a description of a bronze statuette of a nude young woman seated, her head raised with a pensive expression, a *torques* around her neck, and a bracelet on her left wrist. M. R. sees in it the object which inspired the well-known French sculptor, M. Chapu, in the creation of his Jeanne d'Arc.—DELOCHE, *Studies on some seals and rings of the Merovingian period* (contin.). XLVII. Seal-ring of *Leubacius* (now in the treasury of the Cathedral of Tours): it also bears the words: *in Dei nomine*. He is identified, with probability, with the Leubatus who founded a monastery in Touraine in the VI cent. XLVIII. Seal-ring of *Fovana*, in the Cabinet des Médailles in Paris. XLIX. Gold seal-ring of *Solatia* or *Solatius*, also in the Cabinet des Médailles.—R. CAGNAT, *Note on a bronze plaque found at Cremona*. The bronze tablet published and discussed by Professor Barnabei in the *Notizie degli Scavi* (1887, pp. 209 *seqq*; pl. iv) is here further elucidated. The emblems figured on it and the text of its inscription prove that the box to which it belonged was a military box, forming part of the baggage of the IV Makedonian legion; that the date of its manufacture was 45 A. D., when the legion was encamped in Upper Germany. It was probably lost by this legion in defending the cause of Vitellius against Vespasian in 69 A. D. at the famous battle of Cremona.—E. REVILLOUT, *An Egyptian Confraternity*. Translation and commentary are given of the demotic regulations of a confraternity of the time of the Lagidai. It is a confraternity of *choachytes*, and its regulations, contrary to earlier usage, have taken on a religious character. It consisted of four divisions called *kema*, each composed of nine men. The *choachytes* had merely the title of *pastophoroi*, or bearers of the *naos*, and could never entitle themselves priests. Their function was to offer prayers and libations before the dead whose tombs they guarded for a stipend. The regulations with their stipulations and penalties remind of the corresponding institutions in Greece.—A. L. DES ORMEAUX, *Remarks on the mode of use of the bronze bits of Moeringen*. An explanation of the use of the class of prehistoric horse-bits called "bits of Moeringen" is given mainly by showing its correspondence to the Assyrian bits, and supposing that both the bronze and the small breed of prehistoric horses were Asiatic importations, which accounts for the crescent-shaped bit. Related bits are given from the nekropoleis of Watsch, Bologna, and the Caucasus.—S. REINACH, *Chronique of the East*.—SUPPLEMENT. R. CAGNAT, *Review of Epigraphic publications relating to Roman antiquity*. This is the beginning of an im-

portant supplement to the *Revue Archéologique*, confided to M. Cagnat: its object is to notice the important monuments recently edited, and the publications regarding Roman epigraphy.

ALLAN MARQUAND.

REVUE DES ÉTUDES GRECQUES.¹ T. I. No. 1. Jan.-March, 1888.

The annual volume of the Association for the promotion of Greek studies in France, has been transformed into a quarterly under the above title, and thus increases its activity and usefulness. "The original papers will treat of the numerous questions that relate to the literature, history, archaeology and art of ancient and modern Greece." This part will be followed by Notes; Book-reviews; a general Bibliography; a *Chronique* containing news and discoveries.—TH. REINACH, *The inscription of Lygdamis*. This is an attempt to give further explanation of an important Halikarnassos inscription first published by Newton and since him by many other epigraphists, like Kirchoff, Roehl, Hicks, Cauer, Dittenberger, Comparetti and others. Though tolerably complete, the obscurity of the juridical procedure which it regulates and of the political situation which it pre-supposes, have caused disagreement in regard to the very matter of the interpretation, in which, *e. g.*, Comparetti and Kirchoff differ fundamentally. It is in the Ionian dialect of the fifth cent. Though Halikarnassos was colonized by Dorians, it became Ionianized, and probably for that reason left the Dorian league. Beside the Dorians, Ionians, and Karians, M. Reinach finds at Halikarnassos a fourth ethnic element, the Kimmerians, of which he finds a trace in the name Lygdamis, so frequent in a dynasty that governed Halikarnassos and the neighboring islands in the fifth century. The Lygdamis mentioned in the inscription is Lygdamis II, the enemy of Panyasis and Herodotos, whose power was always uncertain and contested; he was born *c.* 475, Herodotos *c.* 484, the inscription does not mention the tribute to Athens, 454, consequently its date is *c.* 455 B. C. A duality of powers is shown: a republican State represented by the city of Halikarnassos and Salmakis; a monarchic power, that of the tyrant Lygdamis, probably installed in the citadel (*cf.* Sinope at time of Perikles). The municipality of H. probably represents the Hellenic city, that of S. the Karian: they formed by their union a single city, *συνοικισμός*. The supreme power is exercised by an assembly of citizens, *σίλλογος*, which met at the public place, *ἐν τῇ ἀγορᾷ*, and whose decisions were entitled decrees, *ἄδος*, or laws, *νόμος*, and do not have force of general law unless taken in accord with the second power, the tyrant Lygdamis. Three classes of magistrates are named: the prytane, the *neopoios*, the *mnemons*—the first the head of

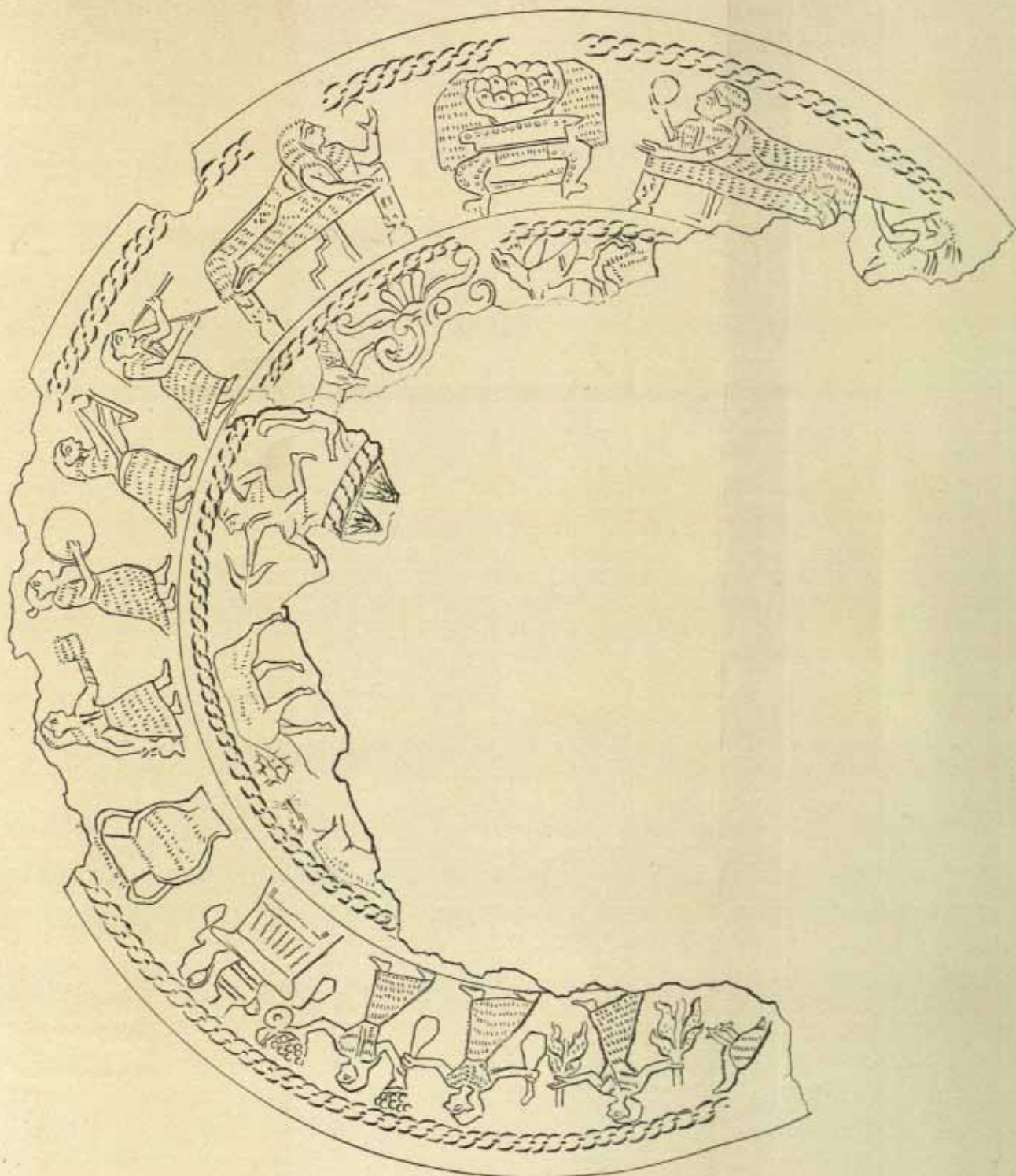
¹ *Revue des Études Grecques*. Publication trimestrielle de l'Association pour l'encouragement des Études Grecques. Paris, E. Leroux, 28 Rue Bonaparte. \$2.50.

civil, the second the head of religious administration, while the mnemons are inferior annual magistrates, two for H. and two for S. The inscription is probably commemorative of a treaty, drawn up, as a compromise, between himself and the citizens, on the victorious return of the banished enemies of the tyrant. As a complete confiscation and sale of property attended every revolt or conspiracy, several of the articles regulated the methods by which the exiles were to recover their property, if application be made within 18 months.—R. DARESTE, *An Inscription from Gortyna*. A short inscription found at Gortyna is thus translated: "In the name of the gods. If anyone make a water-course in the middle of the river, to carry the water over his own property, there shall be no fine to pay. But the water-course must leave in the river as large a volume of water as is measured by the bridge which is above the agora, or more, but not less." It is to be supposed that the bridge over the Lethaios served to measure the height of the water and to give its normal level. This inscription would then be the earliest water-regulation known.—E. BABELON, *Aba of Karia*. Three imperial medals and a group of autonomous coins have been attributed to Aba of Karia. M. B. shows that the latter belong to the *Abbaeti* of Mysia, and one of the medals to Olba of Kilikia, and that the other two do not prove that Aba had any coinage. An inscription recently found in Rome mentions, according to Gatti (*Not. d. Scavi*, 1887, pp. 110–11), a δῆμος Ἀβηνηῶν allied with Rome: but there is a slight lacuna, and M. B. conjecturally restores [T]ABHNQN, well-known ethnic of the flourishing Karian city of Taba. [This conjecture has been proved to be correct by an examination of the stone: GATTI, *Bull. Com. arch.*, 1888].—BIBLIOGRAPHY.—CHRONIQUE. Under this head, an interesting summary of recent news is given, with the titles: *Excavations; Sculpture and Keramics; Numismatics; Epigraphy; etc.* A. L. F., JR.



TERRACOTTA HEAD IN THE ROYAL ANTIQUARIUM AT MUNICH.





KYPRIOTE PATERA FROM KOURION,
IN THE METROPOLITAN MUSEUM, NEW YORK.



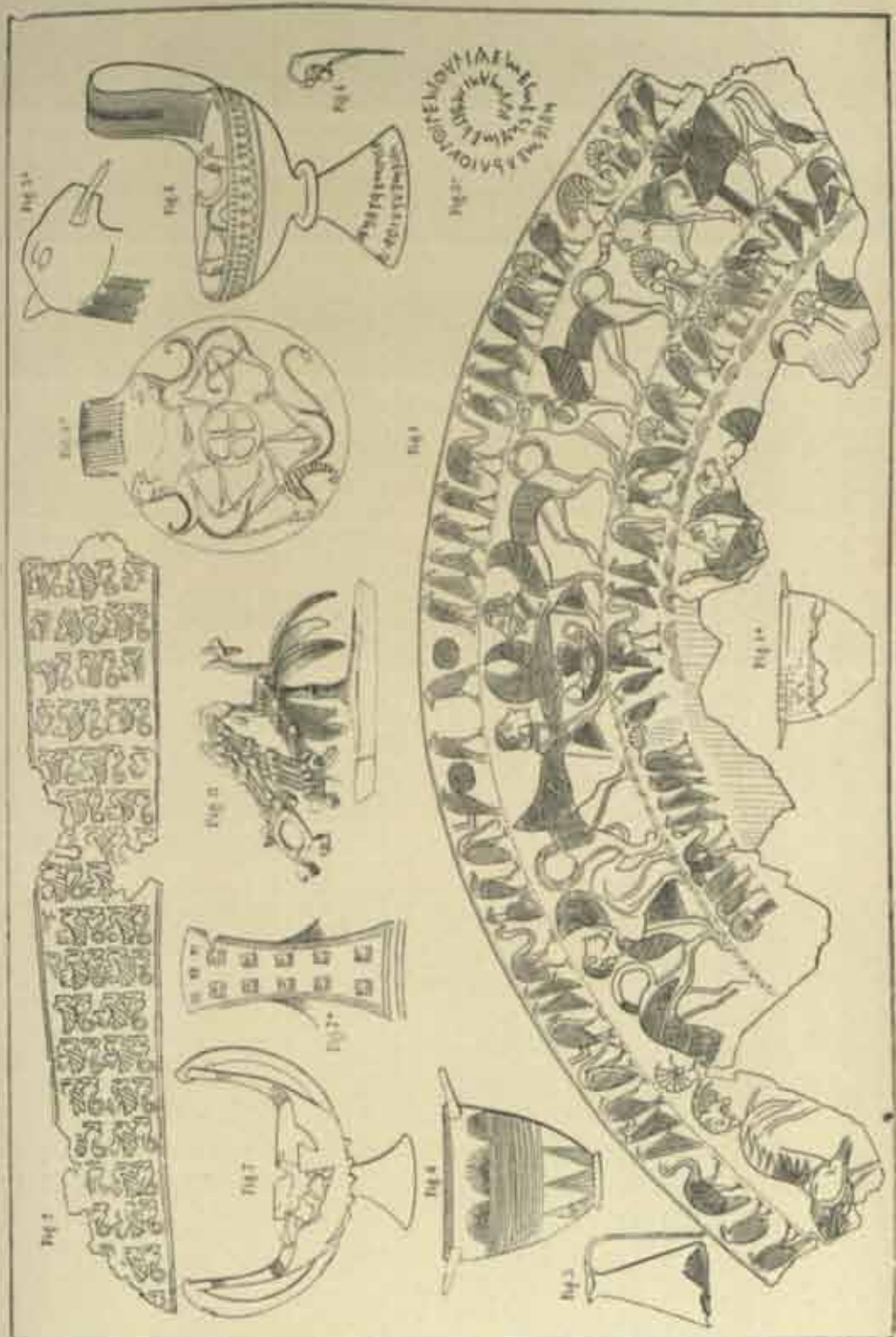
HITTITE RELIEF AT CARCHEMISH=JERABLUS.



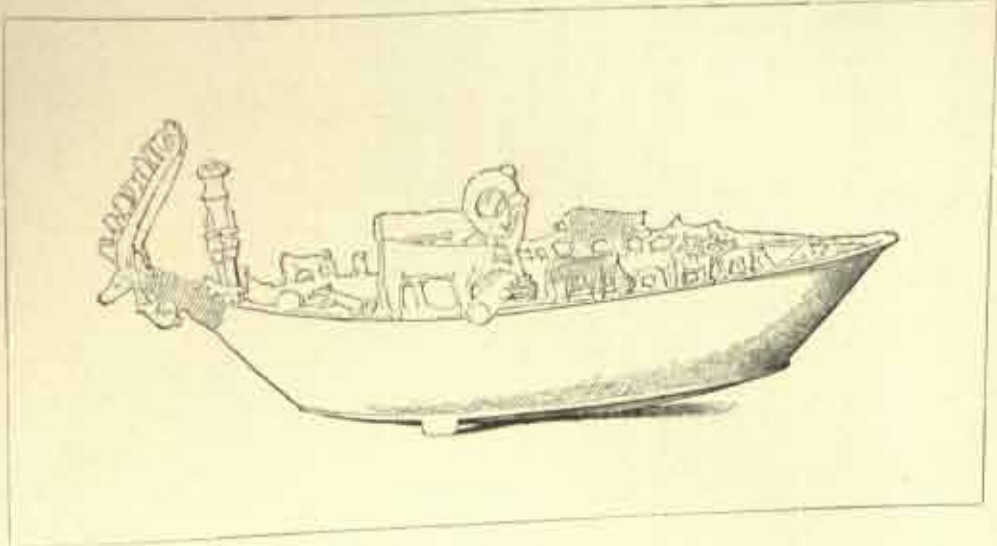


HITTITE RELIEFS AT CARCHEMISH=JERABLŪS.





OBJECTS FROM THE TOMB OF THE WARRIOR AT VETULONIA.



BRONZE VESSEL FROM THE TOMB OF THE WARRIOR AT VETULONIA.

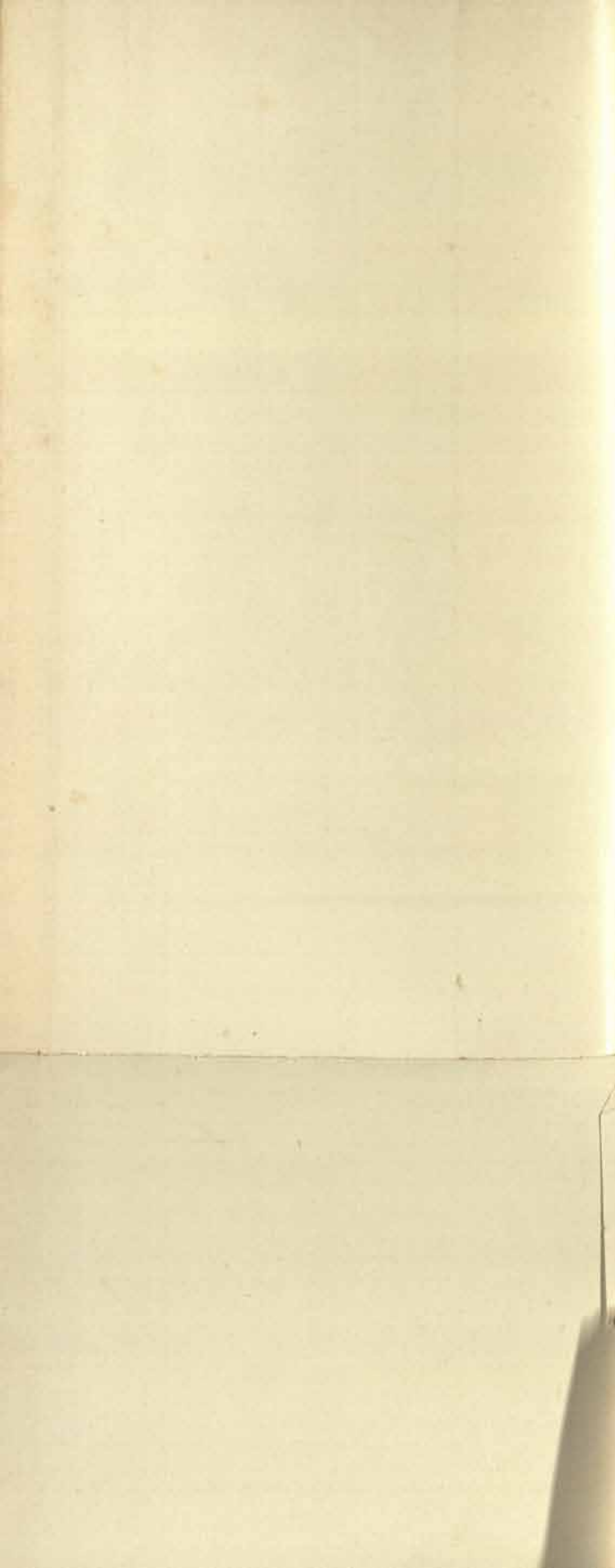


Fig. 1. d

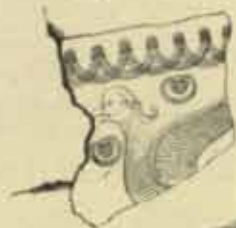


Fig. 2

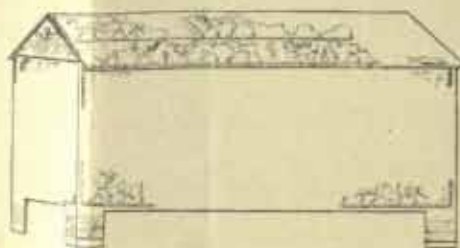


Fig. 1. e



Fig. 1

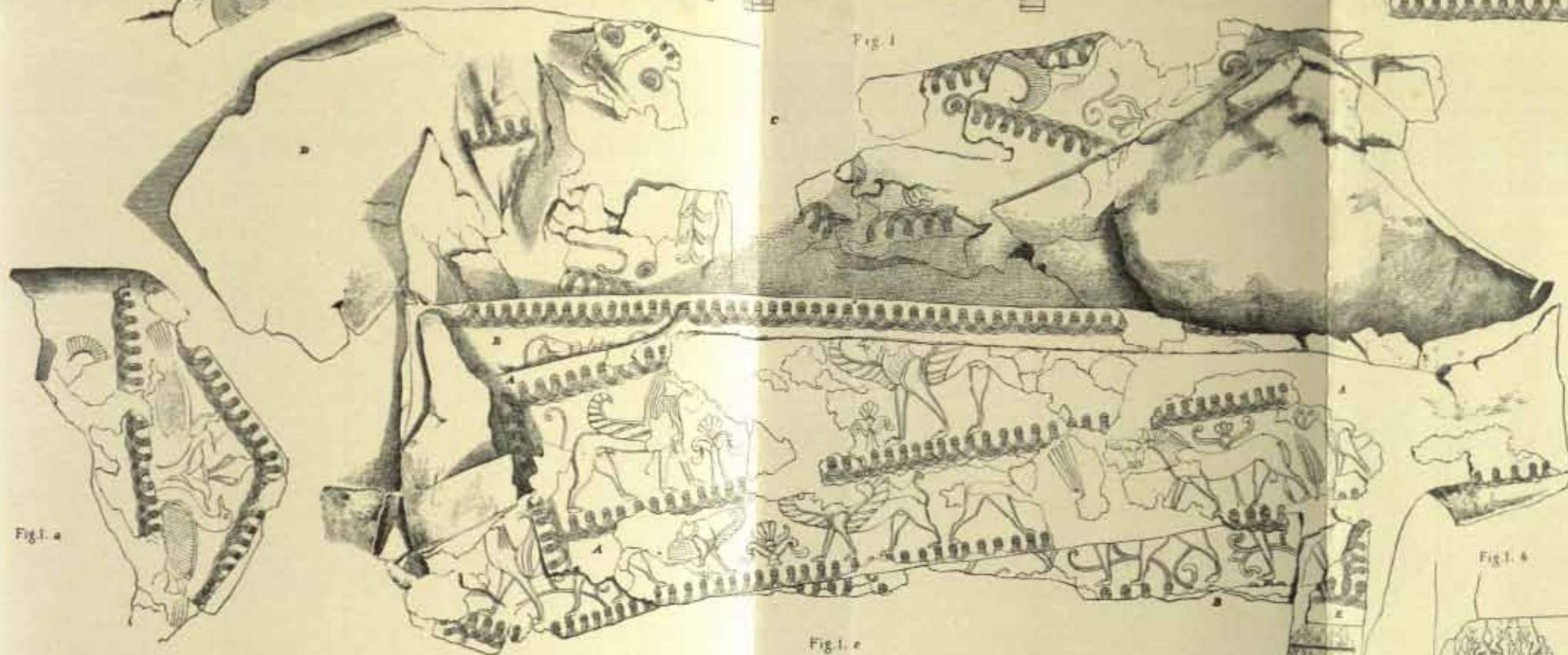


Fig. 1. a

Fig. 1. b



Fig. 1. c





THE AMERICAN
JOURNAL OF ARCHÆOLOGY
AND OF THE
HISTORY OF THE FINE ARTS.

THE JOURNAL is the official organ of the ARCHEOLOGICAL INSTITUTE OF AMERICA, and will aim to further the interests for which the Institute was founded. It treats of all branches of Archæology and Art—Oriental, Classical, Early Christian, Mediæval, and American, and is intended to supply a record of the important work done in the field of Archæology, under the following categories: 1. Original Articles; 2. Correspondence from European Archæologists; 3. Archæological News, presenting a careful and ample record of discoveries and investigations in all parts of the world; 4. Reviews of Books; 5. Summaries of the contents of the principal Archæological Periodicals.

The AMERICAN JOURNAL OF ARCHEOLOGY is published quarterly, and forms, each year, a volume of about 500 pages royal 8vo, illustrated with colored, heliotype, and other plates, and numerous figures. The yearly subscription for America is \$5.00: for countries of the Postal Union, 27 francs, 21 shillings or marks, post-paid. Vol. I, unbound or bound in cloth, containing 489 pages, 11 plates and 16 figures, will be sent post-paid on receipt of \$4: Vol. II, containing 521 pages, 14 plates and 46 figures, bound for \$5.00, unbound for \$4.50: Vol. III, containing 531 pages, 33 plates, and 19 figures, bound for \$5.50, unbound for \$5.

All literary communications should be addressed to the Managing Editor, Prof. A. L. FROTHINGHAM, Jr., Ph. D., Princeton College, Princeton, N. J.: all business communications, to the Publishers, GINN & COMPANY, Boston.

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REVIEW OF PAST WORK.

It has been the aim of the editors that the JOURNAL, besides giving a survey of the whole field of Archaeology, should be international in character, by affording to the leading archaeologists of all countries a common medium for the publication of the results of their labors. This object has been in great part attained, as is shown by the list of eminent foreign and American contributors to the three volumes already issued, and by the character of articles and correspondence published. Not only have important contributions to the advance of the science been made in the original articles, but the present condition of research has been brought before our readers in the departments of Correspondence, annual Reviews of various branches (like Numismatics, Biblical Archaeology, Greek Epigraphy), and reviews of the more important recent books.

Two departments in which the JOURNAL stands quite alone are (1) the *Record of Discoveries*, and (2) the *Summaries of Periodicals*. In the former, a detailed account has been given of all discoveries and excavations in every portion of the civilized world, from India to America, especial attention being paid to Greece and Italy. In order to ensure thoroughness in this work, more than sixty periodical publications have been consulted, and material secured from special correspondents.

In order that readers should know of everything important that appears in periodical literature, a considerable space has been given to careful summaries of the papers contained in the principal periodicals that treat of Archaeology and the Fine Arts. By these various methods, all important work done is concentrated and made accessible in a convenient but scholarly form, equally suited to the specialist and to the general reader.

PROGRAM OF VOLUME IV, 1888.

The years 1888 and 1889 will be distinguished by important papers connected with American research and collections. As a result of the expedition to southern Italy, undertaken, under the auspices of the Archaeological Institute, by Messrs. Clarke and Emerson—which was also extended to Greece and the coast of Africa—there will be published in the *JOURNAL* a series of papers, among which are the following: 1. On the architecture of the temple of Hera Lakinia at Kroton; 2. On the pediment-sculptures of the same temple; 3. On the metope-sculptures of the temple of Apollon Lykeios; 4. On two archaic bronzes at Catanzaro; 5. On some statuary at Tripoli. In view also of recent acquisitions, especially by the Baltimore branch of the Archaeological Institute, there will be articles, by Dr. Hartwig and others, on a collection of black- and red-figured vases signed by well-known Greek artists, such as Nikosthenes, Xenokles, Epiktetos, Duris, Philtias. Professor Emerson will write on a collection of Tarentine terracottas. Professor Marquand will publish another patera in the Metropolitan Museum of New York. Professor Merriam, Director of the School at Athens, will write on Excavations in Greece; and Mr. Carl D. Buck, a member of the School, will publish a paper on Inscriptions recently found on the Akropolis. The results of the recent excavations of the American School at Athens, both at Sikyon and at Ikaria, will be published, the former by Mr. Cushing the latter by Mr. Buck, who had them in charge. The report from Ikaria will include papers on the architectural remains of the shrines of Dionysos and Apollon, the inscriptions, the archaic warrior-slab, the sepulchral stelai, and other pieces of sculpture of various periods.

The various series commenced in past volumes will be continued: such as those by Dr. Ward on Oriental Antiquities, by MM. Müntz and Frothingham on Christian Mosaics. Professor Ramsay (of Aberdeen) will continue his series of investigations of the Antiquities of Asia Minor. M. Salomon Reinach will publish an inedited portrait-bust of Plato, in the Museum of the Louvre; and two inedited terracottas from Myrina, in the Museum of Constantinople. Professor Frothingham will publish papers on The Lost Mosaics of the East and on The Bronzes discovered in the Cave of Zeus on Mount Ida in Krete; and will treat of early Gothic Architecture in Italy, as illustrated by some monuments in the Papal States. Dr. Wm. Hayes Ward will publish some Hittite Sculptures; an inedited archaic Babylonian cylindrical object from Urumya; and a paper on the so-called "human sacrifices" on Babylonian cylinders: Mr. Talcott Williams, a note on the Arch of Chosroes.

The present policy of making the *JOURNAL* a complete record of contemporary archaeological work, by its correspondence, book-reviews, news, and summaries, will be continued.

NOTICES.

London Athenæum.—We have no hesitation in saying that no other periodical in the English language is so well fitted to keep the student who lacks time or opportunity to read all the foreign journals abreast of the latest discoveries in every branch of archaeology.

Göttingische Gelehrte Anzeigen.—No comprehensive account of the most recent discoveries exists, and the new American Journal can do most meritorious work and fill a deficiency which, since the time of Gerhard's death, has been often deplored by every archaeologist who had not the good fortune to be at the fountain-heads.

Philologische Rundschau.—We may expect that the American Journal of Archaeology will take an honorable position by the side of those already existing in Europe.

Bibliothèque de l'École des Chartes.—As we think it (the American Journal of Archaeology) is called upon to render real service, not only in the United States, but in Europe and in France, we take pleasure in announcing it here. The plan is vast and well conceived.

Archivio di Letteratura Biblica ed Orientale (Turin).—Periodicals are divisible into three categories: some have no pretensions to be classed as learned; some pretend to be but are not so in reality; others, finally, pretend to be and really are. The periodical which we announce (*The American Journal of Archaeology*) belongs to the last category.

New York Evening Post.—The American Journal of Archaeology will not disappoint the hopes of the friends of the science in America. If not well supported, it will be because there is little real interest in America in classical and mediæval archaeology.

Chicago Evening Journal.—*The American Journal of Archeology* is alike creditable to the country and to the earnest and scholarly gentlemen who have it in charge, and we are pleased to know that it has already achieved an enviable reputation in Europe.

London Academy.—Mr. J. S. Cotton, at the annual meeting of the Egypt Exploration Fund (London, Dec. 22, 1887), referred to the *American Journal of Archeology* and the *American Journal of Philology*, which he defined as being of a higher order of merit than any publications bearing similar titles in Great Britain.

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VOL. IV.

No. 3.

THE RELATION OF THE JOURNAL TO AMERICAN ARCHÆOLOGY.

* * * * July 13, 1888.

Prof. A. L. FROTHINGHAM,

Dear Sir:—As a subscriber to *The American Journal of Archæology*, I feel it my duty to write you the sense of disappointment which every number produces. Its name appears to me strikingly inappropriate, and it would be better to drop the superfluous "American" and call it the "Journal of Old World Archæology." In spite of its great beauty and evident careful editing, it seems to me to lack real earnestness and to be pervaded by dilettantism. The last two numbers are worse than ever, and the contempt for the great field offered by our own continent could hardly be more evident in expression than in the absolute neglect—not a syllable in the June number, and two paltry notes in that for March, one of them devoted to the Old World. It is no narrow spirit of Americanism in which I write, and I by no means decry the value of the Old World researches, whose importance I fully appreciate, but the sense that here at home are some of the grandest fields of archæology, deserving at least half the space in a Journal like yours.

I am not alone in my views; they are shared by the most of our sincere students, and you cannot expect to arouse interest in this country beyond an extremely narrow circle while you confine your range within such narrow limits.

Hoping that you will not take offence at my words, which but frankly utter what many feel, I am

Most respectfully yours,

* * * * *

The preceding letter, from a correspondent whose name we do not feel at liberty to print, but whose claims to attention would be recognized

by all who have paid heed to the progress of recent investigations in the Southwestern regions of the United States, expresses opinions that have their origin, we believe, in certain not uncommon misconceptions, which we should be glad to remove.

The names of the scholars both at home and abroad who have honored our pages with their contributions authorize us in passing over without notice our correspondent's charge that our Journal "seems to be pervaded by dilettantism."

His objection to the name of our Journal, and his condemnation of it as "strikingly inappropriate" would be well-founded if its title were "The Journal of American Archæology." But "The American Journal of Archæology" is a correct designation of our publication. It distinguishes it from other Journals of similar aim published in other countries: it does not imply that it is to be devoted to the archæology of America. We presume that our correspondent finds no difficulty in the corresponding title of our contemporary "The American Journal of Mathematics." The science of Archæology is no more bounded by national lines than the science of Mathematics. The true methods and ends of all sciences are the same everywhere. It has been a great hindrance to the progress of American archæology that its votaries have generally been ignorant of the methods and results of archæological studies in other countries, and consequently have pursued their investigations with deficient skill, and often have drawn false deductions from their results. One of the main objects in the establishment of our Journal was that it might afford to the genuine students of archæology in America such acquaintance with the progress of the science elsewhere as should supply them with the means for comparison of their own work with that done by others, and enable them to draw just conclusions in regard to the true value and significance of the objects of their special study.

For, in respect to this last matter, there is a common popular delusion which has its source partly in ignorance, partly in a foolish misdirection of national conceit. The archæology of America, even when it has to do with the remains of the former life of still existing native tribes, is essentially prehistoric archæology,—that is, it is busied with the life and work of a race or races of men in an inchoate, rudimentary, and unformed condition, who never raised themselves, even at their highest point, as in Mexico and Peru, above a low stage of civilization, and never showed the capacity of steadily progressive development.

Within the limits of the United States the native races attained to no high faculty of performance or expression in any field. They had no intellectual life. They have left no remains indicating a probability that, had they been left in undisturbed possession of the continent, they would have succeeded in advancing their condition out of the prehistoric state. The evidence afforded by their works of every kind,—their architecture, their sculpture, their writing, their minor arts, their traditions,—seems all against the supposition that they had latent energy sufficient for progress to civilization. These facts do not deprive their remains of interest, but they limit and lower the interest that attaches to them. The remains are well worthy of thorough investigation; they open wide tracts of curious inquiry in respect to the origin and relations of the races that peopled America, and to their customs and beliefs. A comparison of their modes of life and thought with those of other races in a similar stage of development in other parts of the world, in ancient or modern times, is full of interest as exhibiting the close similarity of primitive man in all regions, resulting from the sameness of his first needs, in his early struggle for existence,—a similarity not merely in habits, but also in mental conditions and in forms of expression. But it is only the interest that attaches to crude and imperfect human life; to human life before man has become master of his own faculties, and capable of transmitting the results of accumulated experience from generation to generation. This stage of existence assumes importance only in the case of those races which by slow degrees developed capacity to leave it, and to rise from it by continuous effort. Then, the study of its obscure and pathetic facts takes on a new and general interest, because it becomes the study of the origin and source of civilization, affording explanation and illustration of traits in civilized man otherwise inexplicable, and of those inheritances of barbarism which are to be found in the midst of the most advanced social conditions. It throws light into dim recesses of our own natures, brings us into sympathy with our poor progenitors, and quickens our sense of obligation to our nameless struggling predecessors, who took the first, and perhaps the hardest steps in the ascent from brutishness.

We, therefore, do not share the view of our correspondent, that "here at home are some of the grandest fields of archæology, deserving at least half the space in a journal like" ours, but we are not open to his charge of "contempt for the great field offered by our own continent." On the contrary, we agree with him in the desire that the investiga-

tion of the remains and records of prehistoric man in America should be full and thorough, and that it should be properly reported in our pages. Much of the archaeological work done in this country has been and still is unscientific in method, mistaken in aim, and extravagant in its pretensions. But such work as that of the late Mr. Squier and Mr. Morgan, such as that of Mr. Bandelier and Professor Putnam, such as that proposed by the Hemenway Southwestern Archaeological Expedition in charge of Mr. Cushing, and a portion of that done by officers in the employment of the Government, is deserving of high respect, and has resulted already in clearly defining the boundaries, and determining the character of American archaeology. No great or surprising discoveries are now to be anticipated, and no considerable extension of the field. Much, however, remains to be done, and we shall be grateful to our correspondent whose letter has given occasion to these remarks, and to any other contributor, if they will supply to us for publication either accounts of work in progress in the field, or studies of special topics, such as that by Mrs. Nuttall which we had the pleasure of publishing in volume II.

THE EDITORS.

Colonis. Κολώ[νοις]. Ἡ πρώτη καὶ πιστὴ Κομαμηνῶν κολωνία βουλῆς καὶ δήμου δόγματι Λούκιον Ἰούλιον Κορηλιανὸν τὸν ἀξιολογώτατον ἐκ προγόνων υἱὸν κ. τ. λ.

(6) On the site of Komama :

ΙΟΥΛΙΑΚΑΛΛΙΠΤΙΑΝ
ΠΕΙΑΜΑΡΙΑΝΟΚΤΑΟΥ
ΑΝΤΗΝΓΛΥΚΥΤΑΤΗΝ
ΘΥΓΑΤΕΡΑΥΤΗCΜΝΗ
ΜΗCΧΑΡΙΝ

Ἰουλία Καλλιππιαν[ῆ]
Πεία Μαρίαν Ὀκταου[ρί-
αν τὴν γλυκυτάτην
θυγατέρα αὐτῆς μνή-
μης χάριν.

(7) At the site of Komama, on a fragment of the architrave of a heroön :

//// NOMENHΘΥΓΑΤΡΙΑΥΤΗCΜΑΡΙΑΟΚΤΑΟΥΙΑΚΑΛΛΙΠΤΙΑΝΗ
[Ἰουλία Καλλιππιανῆ Πεία τῇ γε]νομένη θυγατρὶ αὐτῆς Μαρία
Ὀκταουρία Καλλιππιανῆ.

The name Maria shows that the family was Christian.

(8) At Karibtche : published *C. I. G.*, 4367 i, and *A. H. S.*, No. 42.

(9) In a cemetery halfway between Komama and Kestel :

MENNEACMENNEOYNE
ΟΞΚΑΙΠΤΙΟΞΜΕΝΝΕΟΥΦ
ΤΩΠΑΤΡΙΑΥΤΩΝ
-ΝΝΕΑΤΡΟΚΟΝΔΟΥΚΑΙ
ΜΑΡΚΙΑΜΗΤΡΙΜΝΗΜΗC
ΧΑΡΙΝΤΟΝΒΩΜΟΝΚΑΘΙ
ΕΡΩΞΑΝ

Μεννέας Μεννέου νε-
ος καὶ Πίος Μεννέου φ-
ιλτά]τω πατρὶ αὐτῶν
Με]ννέα Τροκόνδου καὶ
Μαρκία μητρὶ μνήμης
χάριν τὸν βωμὸν καθι-
έρωσαν.

D. 19. KORMASA is placed by (1) its occurrence on the march of Manlius (see **E**), (2) its position on a Roman Road, (3) its neighborhood to Lake Askania. The name occurs in Greek in at least four forms, Kormasa, Korbasa, Kolbasa, and Kolbassos : the last is proved by coins with the legend ΚΟΛΒΑCCEΩΝ. In Strabo (p. 570), Ταρβασσός is probably an error for Κορβασσός, the error arising from assimilation to the following Τερμησσός.

The site, near Geulde Tchiflik, was first visited in 1884 (Smith-Ramsay) : the remains of the town, being in a very secluded situation, are in better preservation than usual. They show that there was not a real πόλις : the Kolbasseis lived in a number of *kómai*, and had a central town of small extent, beside which there were numerous graves. *Kómai* of the Kolbasseis existed also at Bereket (called Moatra, *A. H. S.*, No.

10), at a site near Azizie, and probably in other places. Beside the inscriptions already published (A. H. S., Nos. 10, 43-5), Mr. Smith and I copied the following in 1884:

(5) On the entablature of a heroön at Giaour Euren:

ΤΕΡΜΙΛΑΣΑΤΤΑΛΟΥΜΑΝ	ΚΑΙΜΑ	ΚΑΙΩΛΛΑΝΠΡΟΔΩ	ΚΑΙΜΕΝ////
ΜΕΝΝΕΟΥΒΣΟΛΩΝΟΣΤΗΝ	ΜΑΝΤΗΝ	ΝΟΣΤΗΝΤΕΝ	ΒΣΟΛΩΝΟ///
ΓΥΝΑΙΚΑΑΥΤΟΥΚΑΙΑΠΟΛΛΩ	ΓΥΝΑΙΚΑΔΕΛ	ΘΕΡΑΝ	ΠΤΕΝΘΕΡΟΝ
ΝΙΟΝΤΟΝΥΙΟΝΑΥΤΟΥ	ΦΗΝ		ΑΝΕΣΤΗΣΕΜΝΕΙΑΣΧΑΡΙΝ

Τερμίλας Ἀττάλον Μᾶν Μενέου β' Σόλωνος τὴν γυναῖκα αὐτοῦ καὶ Ἀπολλώνιον τὸν υἱὸν αὐτοῦ καὶ Μάμαν τὴν γυναικαδέλφην καὶ Ὀλλαν Ῥόδωνος τὴν πενθερὰν καὶ Μεν[έαυ] β' Σόλωνο[ς τὸν] πενθερὸν ἀνέστησε μνείας χάριν.

(6) At Giaour Euren:

ΝΕΩΝΚΟΜΩΝΟΣ	Νέων Κόμωνος
ΜΟΛΟΥΚΑΙΑΜΜΑΝΤ	Μόλου καὶ Ἀμμαν τ[ὴν]
ΓΥΝΑΙΚΑΑΥΤΟΥΚΑΙ	γυναῖκα αὐτοῦ καὶ
ΖΩΝΑΝΕΣΤΗΣΑΝ	
ΤΑΤΕΚΝΑΑΥΤΩΝΜΝΗ	τὰ τέκνα αὐτῶν ζῶν[τα] ἀνέστησαν μνή-
ΜΗΣΕΝΕΚΕΝΚΟΜΩΝ	μης ἕνεκεν . Κόμων
ΑΛΑΣΤΕΟΣΗΡΓΑ	Ἀλάστεος ἡργά-
ΣΕΤΟ	σετο

Ἀμμα and Μά are forms of the same name: on Ἀλάστεος, see D. 22.

(7) At Geulde (W. M. R.):

ΕΡΜΗΣΛΟΥΚΙΟΥΓΗ	Ἑρμῆς Λουκίου ΓΗ-
ΑΛΟΠΟΥΓΥΝΕΚΙΚΕ	ΑΛΟΠΟΥ γυνεκὶ κέ
ΕΡΜΗΥΠΡΟΜΟΙ	Ἑρμῇ ὑπὸ προμοί-
ΡΩΑΝΕΣΤΗΣΕΜ	ρω ἀνέστησε μ-
ΝΗΜΗΣΧΑΡΙΝΕΙΜ	νήμης χάριν . εἰ μ-
ΕΝΙΔΙΑΜΟΙΡΗΩΦΙ	εν ἰδία μοίρῃ, ὃ φί-
ΛΕΝΕΙΔΕΧΕΡΕΙΔΩΛ	λε ΝΕΙΔΕΧΕΡΕΙ δωλό-
ΠΟΙΟΙΣΗΛΙΕΒΛΕΠΕ	ποιοῖς(?) ἤλιε βλέπε

This badly spelt and badly composed and rudely engraved epitaph is complete and fairly certain in text: I fail to understand it. Another fragment which I copied at Geulde is unintelligible.

(8) At Giaour Euren (W. M. R.):

ΑΥΡΙΑΠΟΛ	Αὐρ. Ἀπολ[ώ-
ΝΙΣΔΙΣΚΑΛΠΟ	νι(ο)ς δις Καλπο[υρνίου]

(9) At Bereket (W. M. R.):

ΠΟΛΛΩ
NIOCM
ENANΔP
Οο[υ

ἸΑ]πολλώ-
νιος M-
ενάνδρ-

D. 20. KREMNA.—The site, which retains the ancient name in the form *Girme*, has been often visited and described. I have not seen it.

D. 21. PANEMOUTEICHOS is known from coins and the Byzantine lists. The order of Hierokles is not decisive as to its situation, but suits well the site near the pass from Pamphylia to the uplands of central Pisidia.

KRETOPOLIS is mentioned by Ptolemy and as *Κρητῶν Πόλις* by Polybios (v. 72): the latter passage shows that it lies near τὰ στενὰ τὰ περὶ τὴν καλουμένην Κλίμακα on the road towards Lydia. *Klimax* is certainly the long steep pass just mentioned: it is literally a κλίμαξ, being ascended by a series of steps for several miles.⁸¹ Kretopolis, then, must be on the north side of the pass. The authorities which mention Kretopolis do not allude to Panemouteichos, and *vice versa*. The same situation suits all that we know of both places. The probability is, therefore, that they are either two names for one city, or two neighboring places.

In all the *Notitiae* a group of bishoprics is omitted: this group lies along the Roman road from Attaleia to lake Askania. The only possible explanation is that this group of bishoprics was separated from the rest of the province and placed under a new metropolis, just as was the case with the bishoprics round Hierapolis (see A. II), Kolossai (see A. VI), Akmonia (see Table in my *Cit. and Bish.*⁸²), and other places. This change was made before the oldest *Notitia* about 850: it had certainly not taken place when Hierokles compiled his list. At some period between these dates, one of the bishoprics (probably either Komama or Panemouteichos⁸³) was constituted a metropolis, and the group of cities along the important road on which it stood were subjected to its authority: but of this important change in the constitution of the province not a single trace is known to me beyond the negative one of their omission in the later lists.

⁸¹ I ascended this pass in 1882 in company with Sir C. Wilson.

⁸² *Journ. Hell. Stud.*, 1887.

⁸³ To judge from modern facts, Panemouteichos seems the more important.

D. 22-25.—The cities along the northern frontier of Pamphylia Secunda are very obscure: to place them correctly is one of the most difficult problems in Anatolian topography. Inscriptions give no direct aid, as the local names which they contain are not found in the Roman or Byzantine authorities. I begin by investigating the social condition of the district under the Empire, as revealed by the inscriptions.

A series of inscriptions found at Tefenni and Karamanli⁵⁴ reveal the name of an otherwise unknown people, the **ORMÊLEIS**. Two dated inscriptions in their country belong to the year 221 A. D.,⁵⁵ and are dated respectively ΠΤΒ and ΤΒ: they therefore imply two different eras, 39 A. D. and the Phrygian era 85-4 B. C.⁵⁶ The era 39 A. D. is hitherto unknown: the inscription in which it occurs is dated also by a procurator (*i. e.*, Augusti), two *πραγματευταί*, and three *μισθωταί*. Comparing this with other inscriptions of the district, we see that the whole territory was an imperial estate, farmed out to *μισθωταί*: this and other estates in the neighborhood were under the general management of a procurator and *πραγματευταί*. The era 39 A. D. is therefore probably the time when the estate was organized, and shows us one step in the gradual organization of Pisidia during the first century of the Empire.⁵⁷ This imperial estate must have been of vast extent: its north-eastern boundary is defined by an inscription at Deuer which I copied in 1884 and published in *Am. Journ. Arch.*, 1886, pp. 128-29. In 1886, I deciphered l. 16, which had previously baffled me: Q. Petronius Umb[e]r, governor of Galatia, and L. Pupius Praesens, procurator, ὡροθέτησαν τὰ μὲν ἐν δεξιᾷ εἶναι Σαγαλασσέων, τὰ δὲ ἐν ἀριστερᾷ κώμης Τυμβριανασσο[ῦ] Νέρωνος Κλαυδίου Καίσαρος κ.τ.λ. This inscription was so placed that the reader, looking north, had on his

⁵⁴ Copied in part by Schönborn; afterwards but still imperfectly and incompletely by Duchesne-Collignon; finally by Sterrett-Smith-Ramsay in 1883. I also re-examined some details in 1886.

⁵⁵ They mention Annia Aurelia Faustina, wife of Elagabalus: they are published not very accurately by MM. Duchesne and Collignon, who omit the lines containing the dates.

⁵⁶ Understanding that the engraver has falsely engraved ΤΒ for ΤΕ: otherwise we must suppose an era 81 A. C.

⁵⁷ Other stages are Augustus' Pisidian Colonies, 6 B. C.; Era of Kibyra, 25 A. D.; Pappa renamed Tiberiopolis; Seleukeia renamed Claudioseleukeia; Ikonion renamed Claudeikonion, and Laodikeia *Combusta* renamed Claudio-Laodikeia; boundaries of Sagalassos defined under Nero; Anaboura of Pisidia renamed (?) Neapolis (see *Mittheil. Athen.*, 1883, p. 76); Pisidia with Lycia-Pamphylia constituted an imperial Province under Vespasian (73-4 A. D.).

right hand, eastward, Sagalassian territory, and on his left hand, westward, the imperial estate named Tymbrianassos. In the direction thus defined in the last clause lies the village Einesh, with an ancient site⁸⁸ close to it: the modern name is the latter half of the ancient compound name.

In the inscription above mentioned three *misthotai* are named: the imperial estate was therefore divided into three parts. One of these was **TYMBRIANASSOS**, now Einesh. Another was **ALASTOS** or **ALASTON**, which is mentioned in several inscriptions: (1) *μισθωτής τῶν περὶ Ἀλαστον τόπων* (A. H. S., No. 4); (2) *C. I. G.*, 4366*x* now becomes intelligible, and we must read [τ]οῖς [ἐ]ν Ἀλάστ[ρω] παραφυλακίταις Ἀύρ. Μ[.] αμῖος ἀρετῆς ἔνεκεν κ.τ.λ.; (3) at Kolbasa I copied an inscription with the artist's signature:

ΚΟΜΩΝ ΑΛΑΣΤΕΟΣ ΗΡΓΑΣΕΤΟ.⁸⁹

Alastos must have been a village near Tefenni and Karamanli, probably at Sazak. The third part of the estate was further south, about Hassan Pasha and Kayali: an inscription which I copied in 1884 contains part of the name:

ΕΤΟΥCCEPMENEΛΛΑΟCΑΠΑPCΑΜΟΥP EYCANETHKEN

In the local adjective the letter P or B is equally possible. The date 196 is perhaps dated according to the era of Kibyra, and corresponds to A. D. 221, but it may be according to an earlier era: *ἀνέτηκεν* is an unusual misspelling. Part of the name of another village in this valley is preserved in an inscription, which I read quite differently from the published form (A. H. S., No. 28): *Ἐμμενίδης*⁹⁰ *Ἀρχοντος*·*ΑΠΥΚΕΞ Ἀρτέμιδι*. In the local adjective the first letter is lost and the second may be A or M.

The people called Ormeleis inhabited the southwestern parts of this vast estate, Alastos and Hassan Pasha. They had therefore no city organization, and struck no coins. Their name is known only from inscriptions, and does not occur in the Byzantine lists; but, where it

⁸⁸ Discovered by MM. DUCHESNE and COLLIGNON, who suggest the name Sanaos, rightly rejected by HIRSCHFELD, p. 322: STERRETT suggests (*Prelim. Report*, p. 7) Themissonion, which is equally impossible.

⁸⁹ *Ἀλάστεις* is here perhaps genitive of the father's name, and not a local adjective: but a name Alastis is connected with Alastos, as Aryassis with Aryassos, Kidramous with Kidramos, etc.

⁹⁰ As the inscription is very rudely scratched on the stone, the name is probably miscut for *Εὐμενίδης*.

might be expected, Hierokles has Maximianoupolis with the ditto-graphy Ktema Max., i. e., the (Imperial) Estate of Maximianoupolis. It is therefore clear that, about A. D. 305-11, the country of the Ormeleis was raised to the rank of a City and Bishopric, and named after the emperor Galerius Maximianus.

Alastos was on the Roman Road which led from Kibyra to the southwestern end of Lake Askania, where it joined the road from Komama to Apameia, and where both united with the road from Takina to Apameia. This road was constructed or repaired under Severus, as is proved by the milestones. One of these was copied by me at Hedja in 1884: it reckons the distance from Kibyra as *caput viae*, although Kibyra is in a different province:

ΟΙΚΘΕΩΝ	τοῖς θεῶν [ἐνφανεστάτοις
ΑΥΤΟΚΡΑ	αὐτοκρά[τορι καίσαρι Λ.
ΣΕΠΤΙΜ	Σεπτιμ[ίῳ Σευήρῳ
ΠΕΡΤΙΝΑΚ	Περτίνακ[ε Σεβαστῷ Ἀραβικῷ
ΑΔΙΑΒ	Ἀδιαβ[ηρικῷ Παρθικῷ
ΚΑΙΑΥΤΟ	καὶ αὐτο[κράτορι καίσαρι Μ.
ΥΡΗΛΙΩ	Λ]ύρηλῳ [Ἀντωνεῖνῳ Σεβαστῷ
////////	[καὶ Π. Σεπτιμῳ Γέτῳ]
////////	[νῳ τῶν μεγάλων]
ΒΑΣΙΛΕΩΝ■ΙΟΥΛΙΑΣ	Βασιλέων [καὶ] Ἰουλίᾳ Σ[εβαστῇ
ΜΗΤΡΙ■	Μητρὶ [Κά]σ[τρων
ΛΙΟΚΙΒΥ	ἀπ]ὸ Κιβύ[ρας

Another milestone, the second from Kibyra on the same road, has been published by MM. Duchesne and Collignon (*Bull. Corr. Hell.*, II, p. 576). The third milestone, found at Yarik Keui, close to Lake Askania, has been published by Mr. A. H. Smith, No. 48: he does not mention that it is a milestone, and omits at the end the symbol **M**: the number which followed the symbol is obliterated.⁹¹

The stations on this road were Kibyra XXVII Alastos XVI Tymbrianasa V Lysinia VIII a village in the Regio Salamara Sagalassensis beside Yarik Keui. The *Geogr. Ravenn.* apparently means some of these stations by the corrupt *Taxon* and *Latrileon*.⁹² In the list of Hierokles

⁹¹ Even without the symbol, the shape of the stone, a round cippus with a square base, is conclusive as to its being a milestone. I added a sketch of the stone to my copy of the text.

⁹² *Latrileon* is assimilated to the following name, *Filaction*: I have sometimes thought that the true name might have been Ormeleon.

we find, on the northern frontier, Regesalamara and Limobrama side by side. The first is obviously the Regio of the "Bitter Salt Lake," i. e., the Lake Askania, which might well be called, as its neighbor the Lake of Sanaos is actually called, *Adji Tuz Göl* ("Bitter Salt Lake"). Limobrama is clearly corrupt: in the second part I formerly conjectured Bria, written, in Hierokles' usual style, Briana (*C. and B.*, xviii): but after having read the name Tymbrianassos, as mentioned above, I should now rather correct it to -brianasa, a by-form of -brianassos (cp. Kolbasa and Kolbassos), and see in Limo- a corruption of the first syllable, Tym.

At the ancient site near Einesh, MM. Duchesne and Collignon found a cippus with an inscription recording peril and escape *ἐν τῷ ποταμῷ Εὐρώ* (or *Σύρω*) *ἐν τῷδε τῷ τόπῳ* (*Bull. Corr. Hell.*, III, 479). The stone has probably not been carried from a distance, because it is not in an inhabited place: it belongs to Tymbrianasa. There is no river near, but a swollen torrent from the hills behind might have imperiled the dedicator. The name therefore cannot denote the Gebren Su, as M. Duchesne thinks, but a small stream in the territory of Tymbrianasa.

There remains one other ancient site on the northern frontier, beside the village of Gebren, discovered by Professor Hirschfeld. There are a great number of ancient fragments, among them four inscriptions:⁹³

(1) Λ ΛΙΚΙΝΝΙΟΣ ΛΙΓΥΣ
ΠΟΤΕΙΔΩΝΙ ΕΥΧΗΝ⁹⁴

(2)	ΙΕΡΑΤΕΥΟΝΤΟΣ	ιερατεύοντος
	ΣΙΛΒΟΥ ΔΙΣ ΕΤΟΥΣ	Σίλβου δις ἔτους
	ΔΙΣ ΕΚΑΤΟCTΟΥ ΚΑΙ	δις ἐκατόστου καὶ
	ΤΕΤΑΡΤΟΥ	τετάρτου.
5	ΣΙΛΒΟΣ ΔΙΣ ΚΑΙ	Σίλβος δις καὶ
	ΚΑΔΑΟΥΑΣ ΧΑ-	Καδαούας Χά-
	ΡΗΤΟΣ ΚΑΙ ΜΗΝΙΣ	ρητος καὶ Μήνις
	ΑΠΟΛΛΩΝΙΟΥ ΒΑΣΙ-	Ἀπολλωνίου Βασι-
	ΛΕΙΔΟΣ ΑΠΟΛΛΩ-	λείδος Ἀπόλλω-
10	ΝΙ ΕΥΧΗΝ ⁹⁵	νι εὐχήν.

(3) contains the word ΙΕΡΑCΑΜΕΝΟΝ: (4) is quite illegible.

⁹³ I spent only an hour in the village: further search would doubtless discover more.

⁹⁴ Published by HIRSCHFELD, p. 323: he has only one N in *Λικίννιος*. Copied by me in 1886.

⁹⁵ HIRSCHFELD's copy of lines 6-9 is unintelligible: he has ΚΑΔΑΜΥΛC in line 6. Copied by me in 1886, with Hirschfeld's copy in my hands.

The date 204 is probably according to the Phrygian era 85-4 B. C., and corresponds to A. D. 119-20. With regard to the ancient name of Gebren, it is impossible, without some other evidence, to accept Professor Hirschfeld's opinion, that it preserves an old name *Kebrene*: *obgleich sie für diese Gegend nicht überliefert ist* (*op. cit.*, p. 323). There seem only two possible alternatives: either Gebren was a village of the great estate above described, or it is the site of Ariassos. Until it is quite certain that no site for Ariassos can be found near Panemouteichos, we cannot decide with certainty between these alternatives, but the remains at Gebren seem too important for a mere outlying village of the imperial estate, and the method of dating by the priest only, without the *μισθωταί* or *ἐπίτροπος*, suggests that the district was not part of the estate. The name **ARIASSOS** must therefore be conjecturally placed at Gebren.

D. 26. KODROULA.—Three inscriptions erected by the Senate and Demos, which were found in the same deserted cemetery a few miles N. E. of Kestel, indicate a city in the immediate neighborhood. The list of Hierokles leaves only Kodroula and the People Isbeis to be placed in the province, and the inscriptions require a city rather than a loosely organized demos: hence, I place Kodroula in the neighborhood of Kestel. One of these inscriptions is published (A. H. S., No. 43). The others are:

(2) ΑΥΤΟΚΡΑΤ	Αὐτοκράτ-
ΟΡΑΚΑΙΘΑ	ορα Καίσα-
■ ΜΑΡΚΟΝΑΥ	ρα] Μάρκον Αὐ-
ΦΗΛΙΟΝΘΕΥΗ	ρήλιον Σευῆ-
ΡΟΝΑΝΤΩΝΕΙ	ρον Ἀντωνεί-
ΝΟΝΘΕΒΑΚΤΟΝ	νον Σεβαστὸν
ΗΒΟΥΛΗΚΑΙΟ	ἡ βουλὴ καὶ ὁ
ΔΗΜΟC	δῆμος.
(3) ΙΟΥ	Ἰού[λιον
Μ ΝΝΕΑΝ	Μ[ε]ννέαν
Ε	Ἐ[ρμαίου?
ΒΟΥΛΗ	ἡ] βουλὴ
ΚΑΙΟΔΗΜΟC	καὶ ὁ δῆμος

(4) To these we must add *C. I. G.*, 4367*k*, which is erected by a soldier of the *XIV Legio Apollinaria*. The legion was stationed in Galatia, and detachments of it may have been in the neighboring *Coloniae*, Komama and Kremna.

D. 27. ISBA.—The name is known only from Hierokles and the *Notitiae Episcopatum*. None of its bishops occur in the Council-lists, and it must therefore have been an unimportant place. Its position in Hierokles points to a situation on the eastern frontier of Pamphylia Secunda, and this is confirmed by the *Notitiae* which assign it to Prima. There is a double entry in Hierokles, Δεμουσία and Δήμου Σαβαίων: these appear to be corruptions of Δήμου Ἰσβα and Δήμου Ἰσβέων (spelt Ἰσβαίων).

D. 28. PEDNELISSOS is fixed approximately (1) by the expression of Strabo (p. 667) ὑπέρεκειται Ἀσπένδου; (2) by the fact that it was in Pamphylia Secunda, the western half of the province; (3) by the narrative of Polybios (v. 72), which shows that it was further south than Selge. Professor Hirschfeld places it, conjecturally, at Sirt. This suits both Strabo and Polybios, but hardly explains why it is in Pamphylia Secunda, rather than Prima: this objection, though not conclusive, would make me look for a site further west, but I have never travelled in the district.

E. THE ROUTE OF MANLIUS.

It will be convenient here to trace the march of the consul Gn. Manlius Vulso, in B. C. 189, through this country (Livy, XXXVIII. 15). From Ephesos to Magnesia he marched by the ordinary road: thence, apparently in one march, he came to the Maeander (*ad Maeandrum progressus castra posuit*), where it required time to transport the army across the unfordable river: he probably crossed at a point nearly south of Magnesia. *Transgressi Maeandrum ad Hieran Comen pervenerunt. Hinc alteris castris ad Harpasum flumen ventum est.* Two days' march brings him to the Harpasos (Arpas Su), past Hiera Kome, a village which must be near the Marsyas, nearly due south of Tralleis. *Ad Antiochiam posuit castra:* apparently one day's march from the river Harpasos to Antioch. From the Maeander-crossing to Antioch is approximately 51 miles, which gives an average of 17 miles per day, when the army is starting fresh and the general is eager for action. *Inde ad Gordiou Teichos processum est. Ex eo loco ad Tabas tertiis castris percentum est.* The total distance is 36 miles in an air-line on my map: I have not traversed the road, and cannot say whether it winds much, but there is a chain of mountains to cross and a rise from 400 feet to 3000 feet above sea-level. The day's march cannot have been less than 12, and may have been 15. Gordiou Teichos, known also

from some rare coins, must be sought for at or a little north of the village Kara Su (a *mudirlik*). *Tertio inde die ad Kazanem amnem per-ventum: inde profecti Erizam urbem primo impetu ceperunt: ad Thabusion castellum imminens flumini Indo ventum est: haud procul a Cibyra aberant.* Thabusion is clearly near Teham Keui. The Erizeni are a people who possessed the country between Kibyra and Themissonion: in this country there are several places with traces of ancient life, and also a weekly market, called Ishkian Bazar, held in the plain, not at any village. Such a market probably (see **ATTOUDDA**) marks the ancient centre of the Erizeni, which should be looked for near Ishkian Bazar. The march from Tabae must have been by way of Apollonia and Sebastopolis, as Manlius would have crossed the Indus, not the Kazanes, if he had taken a more southerly road. On my map, the road from Tabae to a point on the Kazanes, a little above the confluence with the Indus, where Manlius probably crossed, is 32 miles: this gives 16 miles per day, followed by a short march and the capture and sack of Eriza, and then by a one day's march to bring the army within threatening distance of Kibyra:⁹⁶ here six days were spent. *A Cibyra per agros Sindensium exercitus ductus, transgressusque Caularem amnem, posuit castra: postero die est praeter Caralitin paludem agmen ductum: ad Mandropolin manserunt: inde progredientibus ad Lagbon, proximam urbem, etc.* Livy's previous description shows that a *Cibyra* implies only "from the neighborhood of Kibyra." I have not traversed this march, and my impression that the Kaularis is the river flowing from Bei Keui may require to be corrected on better knowledge. The march of the following day led along the northern shore of Lake Karalitis (Sugut Göl): Mandropolis must be a village on its shore. A few miles onward is Lagbon, which was deserted by the inhabitants at the approach of Manlius. *Inde ad Lysis fluminis fontes: postero die ad Cobulatum amnem progressi.* The sources of the Lysis are less than six miles from Lagbon, and thereafter only two possible routes were open to the Consul Manlius: he must go either down the Lysis or southeast towards Istanoz into a highlying plain in which rises a tributary of the Istanoz Su: this tributary is the Cobulatus or *Κολόβατος*.⁹⁷ These marches are very short, but Man-

⁹⁶ Thabusion was out of the territory of Kibyra: a detachment of troops was sent forward, and as it entered the territory was met by ambassadors.

⁹⁷ It is quite consistent with Livy's language that the army may have marched in one day from Mandropolis past Lagbon to the Lysis.

lius was hanging about, waiting for an excuse to enter Pamphylia (*volenti consuli caussa in Pamphyliam divertendi oblata est*). So far as Kibyra, he could allege the necessity of teaching a lesson to king Moagetes (*homini infido atque importuno*). From Kibyra the direct road to Galatia lay up the Kaularis toward Alaston: the consul chose a more circuitous route by Lagbon. Arrived at the valley where the Kolobatos rises, he could no longer pretend that Galatia was his object if he descended that river. Such a movement meant the invasion of Pamphylia,⁹⁸ and he did not venture to invade it without some pretext, which was supplied by the embassy from Isinda. He marched down the Kolobatos to Isinda (*adveniens obsidione Isindenses exemit: Termesso pacem dedit, item Aspendiis ceterisque Pamphyliæ populis: ex Pamphylia rediens, etc.*); and (as we learn from Polybios, though not from Livy) he advanced further south to near Termessos (ὁ δὲ Γάιος τῇ Τερμησσῷ προσεγγίσας). *Ex Pamphylia rediens ad fluvium Taurum primo die, postero ad Xylinen (quam vocant) Comen, posuit castra. Profectus inde continentibus itineribus ad Cormasa urbem pervenit.* Allowing about 12 miles per day: Xylene Kome would be in front of the pass, between Pogla and Komama: thence two days would take him to Kormasa. *Darsa proxima urbs erat: eam plenam omnium rerum copia invenit: progredienti præter paludes legati ab Lysinia dedentes civitatem venerunt: inde in agrum Sagalassenum ventum est: consul prædatum in agros misit: legatis missis pacem impetraverunt: progressus inde ad Rhocrinos Fontes, ad vicum quem Aporidos Comen vocant, posuit castra.* In this passage there are several confused statements. The following description of the actual march will show how Livy's account corresponds to the truth. He advanced along the ordinary road to the southern end of Lake Askania; here he was not far from a city Lysinia, from which ambassadors came to meet him: he devastated the Sagalassian territory (along the lake) until the Sagalassians sent ambassadors and made their peace: the chief town of this district subject to Sagalassos was Darzela, which he took: advancing thence, past the village Aporidos, he encamped beside the Rhocrini Fontes. The account of the march given by Polybios was not very clear: Livy, using it for his narrative, did not make it any clearer, and mistranslated λίμνη as *paludes*. The statement about Aporidos and Rhocrini Fontes, two known points, is quite certainly false. Moreover, Livy's words do not correspond with Polybios

⁹⁸ It is obvious that Livy considers Milyas (valley of Istanos Su) to belong to Pamphylia.

Κύρμασα πόλιν λαβὼν ὁ Γναῖος καὶ λείαν ἄφθονον ἀνέζευξεν . προ-
αγόντων δὲ αὐτῶν παρὰ τὴν λίμνην, παρεγένοντο πρέσβεις ἐκ Λυσιωνίης
διδόντες αὐτοὺς εἰς τὴν πίστιν . οὗς προσδεξάμενος ἐνέβαλεν εἰς τὴν
τῶν Σαγαλασσέων γῆν. According to the excerpt of Polybios, Man-
lius captures Kormasa with much booty : according to Livy he reaches
Kormasa and captures Darsa. The reference to Darsa is perhaps only
misplaced. The later city and bishopric, Durzela, Zarzela, or Zorzila,
was probably situated at Buldur, and was at this time a mere depend-
ency of Sagalassos:⁹⁹ if Darsa is corrupted from Darsila, we could
readily understand that it was captured and plundered by Manlius as
he passed along the lake.

A. PHRYGIA.

X. SANAOS or ANAVA.—The extensive plains along the Salt Lake,
Hambat Kiri and Taz Kiri, contained an ancient city,¹⁰⁰ whose site
with ruins of some interest at Sari Kavak was visited by me in 1881.
Herodotos (vii. 30) mentions this city, on the march of Xerxes, as
"Anava: his reference is unmistakable and conclusive. Sanaos is men-
tioned by Strabo, Ptolemy, Hierokles, and other Byzantine lists: Ptol-
emy places it in southern Phrygia, and Hierokles places it between
Takina and Dionysopolis. No known site except Sari Kavak suits
these conditions. The name Sanaos has obviously lost a spirant, and
the Byzantine form, Sanabensis, shows that the form was ΣάναΦος.
ΣάναΦος and "Anava are obviously two Greek variants of the native
name. In northern Phrygia the ancient Synaos retains, in the form
Simav, the ancient name, which must have been Sūnav: on this analogy
we may take the native name at Sari Kavak as Sanav, which is Grecised
sometimes in the first declension, sometimes in the second. The loss
of Σ in "Anava is natural in Greek: the Lydian city Satala is frequently
written Ἀταλα in Greek documents.¹⁰¹

Sanaos commanded a large and apparently fertile territory, and
possessed the salt which has always been got out of the lake from the
time of Xerxes to the present day. It was also situated on the most

⁹⁹ B Darsa simply a mistake, arising from a false reading in Livy's copy of Polybios?
I incline rather to the view taken in the text (after having for a time held the other):
the coincidence that the town in this part of the territory of the Sagalassians was
named Darzela weighs with me.

¹⁰⁰ For the older opinion on this point, see VII. KERETAPA.

¹⁰¹ Satala was situated on the Hermos, and still retains its ancient name in the form
Sandal, near Koula: see *Journ. Hell. Stud.*, 1887, p. 519.

important road in the country, the great highway which brought the trade of the central and eastern provinces through Laodikeia to Ephesos. Yet it struck no coins, and is never referred to except in the passages above quoted.¹⁰² Its apparent obscurity is due to the probable fact that it was not an independent city under the Roman Empire, but was under the dominion of Apameia. Dion Khrysostomos mentions that a large and populous country was subject to Apameia, and as Seiblia bounded it on the north, Metropolis and Apollonia on the east, Pisidia on the south, there remain only Aulokra, Sanaos, and perhaps Mallos, under its dominion. Other examples of wide dominion exercised by great cities are known. The best attested examples are Nakoleia, whose power extended over Orkistos and therefore over the whole vast intermediate plain, down to A. D. 331, and Sagalassos, which possessed the whole country along the south side of Lake Askania: besides these, Prymnessos, Akmonia, and other cities must have had a wide dependent territory, though no precise authority attests it.

XI. MOTELLA or METELLOPOLIS (*C. and B.*, II, IX).—When writing on the *Cities and Bishoprics of Phrygia*, I observed, too late, that Metellopolis of the Byzantine lists is the same place as Motella of the inscriptions. My sole reason for placing Metellopolis in this neighborhood was that the bishoprics subject to the metropolitan of Hierapolis evidently formed "a well-marked district having its centre in Hierapolis." This argument is now conclusively proved correct; the six bishoprics lie side by side along the southwestern boundary of Phrygia Pacatiana (see II. **HIERAPOLIS**).

The use of the form Metelloupolis for Motella is common in Byzantine documents: thus we have *Φιλαδελοφούπολις* for *Φιλαδέλφεια* (even *εἰς τὴν Φιλαδέλφου* occurs). The name Motella is not mentioned by Hierokles: I believe however that the city occurs under the temporary name of Pulcherianopolis. The last names in his list are those of the cities on the western frontier of Phrygia from north to south. The last name, Pulcherianopolis, must be either Blaundos or Motella. Formerly (*C. and B.*, Table, *J. H. S.*, IV, 373), I identified it with Blaundos, understanding that Hierokles in this instance disagreed with the *Notitiae*, which assign Blaundos to Lydia. The balance of probability, however, is that Pulcherianopolis is Motella. I have already (*C. and B.*, VII) stated that "the modern unity of name and govern-

¹⁰² The utter want of inscriptions is probably due to ignorance of the country. It has never been explored.

ment throughout Tchal is probably true to ancient fact." Now Tchal includes the whole territory of Motella, Dionysopolis, and the Hyrgaleis, and we see from the inscriptions (*C. and B.*, 11, 14, and several unpublished) that Motella was closely connected with the other two. If we could accept the name Pulcherianopolis, it would definitely prove that Motella was erected into an independent city and bishopric about A. D. 414-53. If, however, subsequent investigation should make it more probable that Pulcherianopolis is Blaundos, we should then have to admit that Motella was not a city when Hierokles compiled his list, but that it was dignified by Justinian when he remodelled Phrygia Pacatiana.

The bishops of Motella, besides those mentioned by Lequien, are Michael in 556 (*C. and B.*, 13) and Kyriakos mentioned in an inscription at Keuseli (Hogarth-Ramsay, 1887) of about 660-70 A. D.: *ἰνδ(ικτιῶνος) δέ, μη(νός) αἰ', ζέ, ἀνέστη τὸ θυσιαστήριον ἐπὶ Κυριακοῦ τοῦ θεοφιλεστάτου ἐπισκ(όπου).*

XII. DIONYSOPOLIS (*C. and B.*, IV).—Mr. D. G. Hogarth is making a study of the curious series of inscriptions from this district; see *Journ. Hell. Stud.*, 1887. The following villages or districts of the territory of Mossyna and Dionysopolis are known.

(1) ΑΤΥΟΚΗΟΡΙΟΝ: the settlement (*χωρίον, κόμη*) round the temple of Apollon Lairbenos (see Hogarth, *l. c.*). In 1887, I was able to decipher the whole inscription published *C. and B.*, 6: 'Απολλωνίου Μηνοφίλου τῷ διὰ γένους ἱερεὶ τοῦ Σωτήρος Ἀσκληπιοῦ κ.τ.λ. As at Mossyna, we have here an example of the priesthood hereditary in a family. The name of the god is interesting: *C. and B.*, 5, dedicated by the same Apollonios, makes it practically certain that he was the priest of Lairbenos. His children are much more Greek in their style: instead of the family names, they have names taken from the epic cycle (Iphianassa and Laomedon), and they prefer to call their father's god by the Greek name Asklepios.¹⁰³ This is an interesting example of a fact that I have often insisted on—Greek mythology and nomenclature are substituted for Anatolian wherever the Græco-Roman civilization spreads.¹⁰⁴

(2) SALOUDA: the inscription, *C. and B.*, 9, gives the name as Sal-

¹⁰³ The worship of Men Karou at Attoudda shows that the Anatolian type of god has a side of his character closely akin to that of Asklepios: a medical school was attached to the temple.

¹⁰⁴ *Jour. Hell. Stud.*, 1883, pp. 64-5; 1882, p. 64.

salouda; but another, which I copied in 1887, shows that Salouda is the true form, and that $\Sigma\Lambda\Lambda$ is doubled by a mere error of the engraver. The name Salouda is related to Sala as Attoudda to Attaia, or as Aloudda to Alia. Salouda was near Kabalar, where both inscriptions were found.

(3) **MELOKOME** is mentioned in the same inscription with Salouda: it must be near Salouda.

(4) **KAGYETTA**: beside Develar, where in 1888 I copied a fragment of an inscription beginning $\delta\ \delta\eta\mu\omicron\varsigma\ \delta\ \text{Καγυεττέων}\ \epsilon\tau\acute{\iota}\mu\eta\sigma\epsilon\nu\ \text{Εὐτύχη}\ \text{Ἰόλλου}\ [\phi]\iota\lambda\omicron[\kappa\alpha\acute{\iota}\sigma\alpha]\rho[\alpha.\ \phi\iota\lambda]\acute{\omicron}\pi\alpha\tau\rho\iota\nu$. The name must also be restored in an inscription published by Hogarth (*l. c.*, p. 394) $\pi\alpha\rho\acute{\alpha}\ \tau\omicron\upsilon\ \delta\eta\mu\omicron\nu\ [\text{Καγυ}]\epsilon\tau\tau\acute{\epsilon}\omicron\varsigma$.

(5) **THIOUNTA**: beside Geuzlar, where in 1888 I copied two inscriptions. They are engraved on two very large stelai, adorned with elaborate sculptures. The pediment of each stele shows Zeus standing in the centre with sceptre in left hand and holding out the right hand. To the left is Fortune of the Roman type with the rudder, and further to the left a quadriga in which stands the sun-god with radiated head. On the right is Hermes standing with caduceus in left and purse in right hand, and further to the right a car drawn by two oxen: the person who stood in this car is hopelessly defaced in both stelai. Both the ox-car and the quadriga are turned towards the centre. In the older stele, which is more rudely carved, the first group of the inscription is engraved below the pediment in several lines, irregularly: in the later stele, the first group is engraved in two lines along the top of the pediment. Each name of the long list which follows the introductory formula is written in two or three lines, and under the name the full-length portrait is carved in relief. In each stele there are therefore three rows of portraits, each row containing eight figures: all the portraits are exactly the same, except that some are bearded, others beardless: all stand, facing, with left hand hanging by the side and right hand appearing between the folds of the himation on the breast.

First Stele.

(1) $\delta\ \delta\eta\mu\omicron\varsigma\ \delta\ \Theta\iota\omicron\upsilon\nu\tau\acute{\epsilon}\omega\nu\ \epsilon\tau\acute{\epsilon}\iota\mu\eta\sigma\epsilon\nu\ \sigma\tau\acute{\eta}\lambda\lambda\eta\ \kappa\acute{\epsilon}\ \sigma\tau\epsilon\phi\acute{\alpha}\nu\phi\ \phi\rho\acute{\alpha}\tau\rho\alpha\nu\ \tau\acute{\eta}\nu\ \pi\epsilon\rho\acute{\iota}\ \Theta\epsilon\acute{\omicron}\delta(\omicron)\tau\omicron\nu\ \Delta\iota\omicron\gamma\epsilon\nu\epsilon\iota\alpha\nu\acute{\omicron}\nu\ \kappa\alpha\acute{\iota}\ \Gamma\acute{\lambda}\acute{\upsilon}\kappa\omega\nu\alpha\ \Delta\iota\omicron\delta\acute{\omega}\rho\omicron\nu\ \acute{\alpha}\gamma\omega\nu\omicron\theta\acute{\epsilon}\tau\eta\nu$. $\Theta\epsilon\acute{\omicron}\delta\omicron\tau\omicron\varsigma\ \Delta\iota\omicron\gamma\epsilon\nu\epsilon\iota\alpha\nu\acute{\omicron}\varsigma$. $\Gamma\acute{\lambda}\acute{\upsilon}\kappa\omega\nu\ \Delta\iota\omicron\delta\acute{\omega}\rho\omicron\nu\ \acute{\alpha}\gamma\omega\nu\omicron\theta\acute{\epsilon}\tau\eta\varsigma$. $\text{Ζεϋξ}\ \Delta\iota\omicron\delta\acute{\omega}\rho\omicron\nu\ \text{Ἀππας}\ \acute{\alpha}\gamma\omicron\rho\acute{\alpha}\varsigma\alpha\varsigma\ \tau\acute{\omicron}\pi\omicron\nu\ \sigma\tau\acute{\eta}\lambda\eta\varsigma$. $\text{Μένανδρος}\ \Gamma\acute{\lambda}\acute{\upsilon}\kappa\omega\nu\omicron\varsigma$. $\text{Ζώσιμος}\ \text{Κυρτός}$. $\text{Εὐτύχης}\ \text{Εὐάρου}$. $\text{Μενεκλῆς}\ \text{Ἀλ(ε)ξάνδρου}$.

Λυκώτας Ἀπολλωνίου. (2) Διόδωρος δ' Γοργίων. Διόδωρος β' Χερύλου. Μένανδρος δις Κύρων(ος). Ἀθηναγόρας Ἀπολλωνίου Σαβυς. Ἀ[πελ]λίδης Διοδώρου Θεόφιλ[ος]. Ἀπολ(λ)ώνι(ο)ς Ζεῦξις πη.... ν. Ζεῦξις Κρυσίωνος. (3) Ζώσιμος Ἀλεξάνδρου. Εἰόλλας Ζεῦξιδος. Μένανδρος Ἀφ(φ)ειανοῦ Λεπτοπ(οι)οῦ. Διόνυσος Τροφίμου. Ἀθηναγόρας Εἰλικίωνος. Διογένης Αὐξινίωνος. Τατιανὸς δις Διονυσίου. Ἀθηναγόρας Κερκυς. (4) καὶ ἤλιψαν ἡμέρας ἡ'.

Second Stele.

(1) Ἀγαθὴ τύχη. ὁ δῆμος ὁ Θιουντέων [ἐτείμησαν] στήλην καὶ στεφάνῳ φράτρην τὴν περὶ Διόδωρον Ἀθηναγόρου Κολοκυνθιανὸν καὶ περὶ Ἀθηναγόραν Διοδώρου Γοργίωνος. (2) Διόδωρος Ἀθηναγόρου Κολοκυνθιανὸς ἔδωκεν ἰς τὴν παννυχίδα (δηνάρια) φν'. Ἀθηναγόρας Διοδώρου Γοργίωνος. Κάσμος γ' τοῦ Παπίου παραφύλαξ. Ἀπολλώνι(ο)ς β' Λαπίσας. Θεόκριτος Θεοκρίτου Κορυδών. Ἀπολλωνίδης Ἀπολλωνίδου Λεχίτου. Τατιανὸς Παπίου Αἰγεών. Ἀπολλώνιος Διοδώρου Χαιρύλου. (3) Ζεῦξις β' Ἰόλλα. Ζεῦξις Διοδώρου Κορυδών. Εὐξενίων Ζωσίμου. Ἰόλλας Ἀπολλωνίου. Ζεῦξις Ἀπολλωνίου Μικκήτου. Ζεῦξις Μενάνδρου Ψαφαρου. Ἀπολλώνιος β' Κεννηνίων. Ἰούστος β' Ἑλλήνιος. (4) Θεόδωρος Μάσωνος (perhaps Μ(ν)άσωνος?). Ἀπολλώνιος Θεοφίλου Πιτυρᾶ. Ζεῦξις Ἀπελλίδου Μυρῆδος. Ἰόλλας Ἰκεσίου. Ζεῦξις γ' Γαίου. Εὐτύχης Διδύμου. Μένανδρος Εὐξενίωνος. Γλύκων Εὐτύχου Μόνγος. (5) ... εἰδη ἐποίησαν παννυχίδα τῷ Διὶ ἡμέρας ἡ' καὶ ἤλιψαν ἡμέρας ἡ'.

It appears that the first of these stelai is about a generation older than the second. Both probably belong to the second century after Christ, and the utter want of Roman names, as contrasted with the inscription of Mossyna given above (A. III), is explained by the secluded position of the village. I passed over this country four times before I found that such a village as Geuzlar existed.

All these villages, with the exception of Atyokhorion, belonged to the territory of Mossyna more probably than to that of Dionysopolis. Under the Roman Empire they were apparently distinct *demoi*, but under the Byzantine Empire they were grouped along with the *demos* of the Mossyneis as a single Bishopric.

XIII. HYRGALEIS (C. and B., VII).—With regard to *THE KOINON OF THE HYRGALEAN PLAIN*, I have nothing to add to the remarks in C. and B., except that, while the discussion of the Roman Roads in

the commentary on No. 11 still seems to me correct, the paragraph referring to Plautius's official position ought to be expunged. Roads in a senatorial province are very rarely constructed or repaired under proconsular authority.

The seat of government for the whole Tchal Ova is now Demirji Keui, but the weekly market for the district is held at Kai Bazar (A. IV).

XIV. LOUNDA (*C. and B.*, XI) was situated on a very strong position within the sharp angle where the Meander turns north into the Hyrgalean Plain. The steep slopes of the hill on which it stood are surrounded on three sides by the river. But in the peaceful times of the Pergamenian and Roman rule, the city spread west and southwest; remains are numerous both below in the gorge of the Maeander, and on the other side in the neighborhood of Mahmud Ghazi. The inscription, *C. and B.*, 16, which I formerly attributed to Lounda, must be transferred to Peltae (see XV).

In 1887, Mr. Hogarth and I revised the important inscription which is our only authority, besides Byzantine lists, for the name Lounda (*C. and B.*, No. 15). The following shows that the young men of Lounda were united in an association of a kind common in Græco-Roman cities. It stands in a cemetery on the left bank of the Maeander beside the village Seid (Hogarth-Ramsay, 1887):

ΟΙΝΕΟΙ	<i>οἱ Νέοι</i>
ΔΙΟΝΥΣΙΟΝ	<i>Διονύσιον</i>
ΤΟΝΓΡΑΜΜΑ	<i>τὸν γραμμα-</i>
ΤΟΦΥΛΑΚΑ	<i>τοφύλακα</i>
ΕΝΩΟΥΔΕΙΣ	<i>ἐν ᾧ οὐδεὶς</i>
ΕΤΕΡΟΣΚΗ	<i>ἕτερος κη-</i>
ΔΕΥΘΗ	<i>δευθῇ[σεται]</i>

The last five letters have disappeared, without leaving a trace.

XV. PELTAE (*C. and B.*, XII).—The site is probably between Kara Agatchlar (pronounced Karayashlar by the natives) and Yaka Keui, on a large rocky mound. Inscription *C. and B.*, No. 16 is, in all probability, to be referred to Peltae, not to Lounda: it was found about half-way between the two sites. The restoration of the last line occurred to me too late for publication: it should read *κόψας καὶ [νομ]ίσματ[α]*. Apollodotos, son of Diodoros, erects the statue of Antoninus Pius, and at the end of the text boasts that he has struck coins; *i. e.*, of course, coins of the city to which he belonged. Now the coins of Peltae, after

a long interval, begin again under Antoninus Pius.¹⁰⁵ It is to be hoped that coins of Apollodotos may be found, and prove or disprove my attribution of the inscription.

XVI. ATTANASSOS (*C. and B.*, x). XVII. EUMENEIA (*C. and B.*, XIII).—I have made a careful study of the antiquities of this district in a separate paper, which I hope soon to publish: the great number of inscriptions (120 are known) makes it impossible to treat the subject in this sketch.

XVIII. SEIBLIA (*C. and B.*, XIV).—The modern name Homa is the Byzantine *Xōμα*, the name of a late Thema, which is closely connected with the wars of the twelfth century between the Byzantine emperors and the Seljuk sultans of Konia (see *Amer. Journ. Arch.*, 1886, p. 123). The name *Xōμα* applied to the Theme may perhaps be explained by an expression which occurs in several of the important series of inscriptions relating to the worshippers of Artemis Limnaia in Pisidia:¹⁰⁶ *Μάλλος πρὸς Χῶμα Σακηνόν*. This Mallos is the Pisidian city, which is distinguished from the Kilikian Mallos by the phrase *πρὸς Χῶμα Σακηνόν*. I have been led to the supposition that the name Mallos must be given to the city near Kilij, south of Ketchi Borlu. There are only two striking features in the landscape here, Lake Askania and the beautiful peak Aidoghmush.¹⁰⁷ I conjecture that the city is distinguished by the name of the mountain beside it, which is in full view above the intervening mountains, even from so great a distance as the country where the inscriptions were found; and that the name of the mountain was in the twelfth century applied to the Theme. Finally, the name of the Theme was given to the chief fortress in it, viz., Seiblia, still called Khoma.

¹⁰⁵ Peltae appears to have lost its power after Eumeneia was founded, and not to have recovered for a long time. Mr. HEAD attributes the early coins of Peltae to the first century B. C.; I should feel disposed to place them about 250–150 B. C.; and to see in their types the Syrian influence, as contrasted with the Pergamenian style of early Eumeneian coins.

¹⁰⁶ This whole series will soon be published by Professor Sterrett. The first of them was published by me in *Journ. Hell. Stud.*, 1883, p. 23, with a commentary which is, I think, confirmed and proved in all essential points by the new inscriptions discovered by Professor Sterrett, all of which I have read on the stones. The old pagan goddess has been replaced by the Virgin Mother of God, who is still the saint most venerated among the Christian population. Her home is on an island in the northeast corner of the *Almarai*, in the centre of a purely Turkish country.

¹⁰⁷ This name, "the rising moon," is almost the only example known to me of a Turkish local name showing imaginative sympathy with nature.

LAMPE.—The references of Niketas, Kinnamos, Skylitzes and Anna Komnena, to Lampe are not sufficiently precise to localize it. It lay on the route from Khonai to Seiblia, probably not very far from the latter. A passage in Niketas¹⁰⁸ has been understood as implying that Lampe was another name for Kelainai; but the passage is one in which (as Finlay remarks in another connection) Niketas "requires to be read with great caution in order to separate his meaning from his rhetoric." Any pretext to introduce a piece of fine writing was welcome to Niketas, and the remarkable natural features of Kelainai gave a fine opening: the purely rhetorical character of the digression is shown by the use of the name Kelainai, which, when he wrote, had been disused for 1400 years.

JUSTINIANOPOLIS appears only in the latest *Notitiae III, X, XIII*: the name shows that it must have been in existence when the other *Notitiae* were transcribed, and if it is omitted in them the reason probably lies in a principle which I have stated elsewhere.¹⁰⁹ We may say, at once, with confidence that (1) Justinianopolis must have been an important place; (2) it must have been a fortress forming part of the magnificent series of defences built by Justinian along the important lines of communication; (3) we should expect to find some reference to it in the military history of the Byzantine Empire. All these considerations point to Seiblia. It was a fortress at a *kleisoura*, built in former time by an emperor careful of the defences of the kingdom, and rebuilt by Manuel Komnenos. With the strong fortress of Khonai it forms the chief centre of interest when southern Phrygia became the scene of warfare. In any scheme of defence against invasion from the east, some strong fortress was required to defend the roads leading from the plateau towards Karia and Ionia: Justinian built Justinianopolis for this purpose, and all our information points to the conclusion that the fortress in question was at Sublaion or Seiblia.

ΟΙΚΟΚΟΜΕ (corrupted *Oikonomos* in *Not. I*) was a village administered by the same bishop as Justinianopolis. According to a principle of very frequent application (see above D. 16),¹¹⁰ we must, since the latter

¹⁰⁸ εἰς Λάμπην Ἰκετο καὶ πόλιν Κελαινὰς ἐνθα τοῦ Μαιάνδρου ἐκβολαί (here follows a description): κακείθεν εἰς τὸ Κῶμα ἐλθὼν τῇ Μυριοκεφάλῳ ἐφίσταται, p. 230. On Myriokephalon, see *Amer. Journ. Arch.*, l. c. Λάμπην in the Bonn text is probably a misprint.

¹⁰⁹ The official lists were carelessly kept, and not always corrected to date: *Journ. Hell. Stud.*, 1887, p. 463.

¹¹⁰ See also *Journ. Hell. Stud.*, 1888, p. 462, No. 5, and p. 487.

is a highlying fortress, look for the former in the plain beneath. Now the Peutinger Table places in this very situation, halfway between Apameia and Eumeneia, a station *ad Vicum*. I have no hesitation in identifying this Vicus with Oiko-kome.

The village Lampe is perhaps the same as Oikokome. It was a place of some note: Δημήτριος, Ῥωμαῖος μὲν γένος, Λάμπης δὲ κώμης ὠρμημένος Ἀσιανῆς: Kinnam., p. 251.

In the principle above quoted, the careless keeping of the registers, I find the explanation of the double entry of Soublaion in the middle of the list and Oikokome with Justinianopolis as the last bishopric.

GRAOS GALA and KHARAX were points on the Byzantine military road between the two important fortresses Khonai and Seiblia: the former not very far from Khonai, the latter μεταξὺ Λάμπης καὶ τοῦ τῆς Γραὸς Γάλακτος.

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N. B.—In the inscription of Pogla, No. 7 (JOURNAL, 1888, p. 10), a note should be added: that Εὐχρόμιος was the familiar name of Aur. Arteimianos: it is a common practice to place at the head of an honorary inscription the name (gen. or dat.) by which the person honored was commonly known; sometimes this name is repeated in the text, sometimes not: see Marquardt, *Privatalt.*, p. 27; Orelli-Henzen, No. 6252; Borghesi *Oeuvres* (*Lapide Gruteriana*), III, p. 503 ff. An example occurs in inscr. No. 419 of Sterrett, *Wolfe Expedition*, where read gen. or dat., not accus.

In the inscription, Pogla, No. 14 (p. 14), a mark of interrogation has been omitted after *πρ(ιμικηρίων)*: I see now, however, that *ἀπὸ πρ(ογόνων)* is a more probable restoration.

In the table opposite p. 6, in the column headed *Epist. ad Leonem*, "Tertia" should be erased in both cases.

I omitted to mention, under C. 2, that the identification of Brioula was communicated to me, years ago, by Mr. Purser, manager of the Ottoman Railway.

W. M. R.

THE ANCIENT COINAGE OF CHINA.

[PLATES XII, XIII.]

From the beginning of authentic history, the Chinese have had money. Inventors of printing, of the manufacture of silk, porcelain, and gunpowder, they were also the inventors of coined money. Their first money was, indeed, in the shape of gems or precious stones, and shells or cowries, which were strung together on a silken thread and sometimes fastened as ornaments on a warrior's helmet.¹ But, not only were the Chinese original in the coining of money, they were also the first numismatists. The earliest writers on Chinese coinage are Kuan Tzu (645 B. C.), one of the most renowned Chinese statesmen of antiquity,² and Chia I (200 B. C.), a celebrated scholar and privy counsellor to Han Wen Ti (179 B. C.), as well as a distinguished writer on Chinese finance. Quotations from the writings and a record of the opinions of these two men are given and commented upon in the great history of China written by Ma Tuan Lin (1245 A. D.).³ The oldest native catalogues of coins are one by an unknown author during the Sui dynasty (581-618 A. D.), and a book by Feng Yen of the Tang dynasty (618-905 A. D.). Only fragments of these books now remain. The oldest catalogue that has anything like completeness was compiled by Yang Hung Tsun, during the reign of Kao Tsung, the second Emperor of the Southern Sung dynasty (1127-1278 A. D.). The book was printed in the 19th year of this monarch's reign, and the exact date of its issue was August 1146 A. D. The title reads *Ch'uan Chih*, or a "Record of Coins." In the preface the author states that he has followed the stream of coin-history from the most ancient times to the present: and that he will give an account of all coins, heavy and light, large and small, of successive dynasties. He tells us also of the immense difficulties which he had to overcome: "flooded by water, scorched by heat, choked with dust," only faintly suggest the obstacles he has con-

¹ LEGGS, *Chinese Classics, Shih Ching*, vol. 4, p. 626.

² MAYERS, *Chinese Reader's Manual*, p. 243.

³ Ma Tuan Lin was a scholar of extensive learning the results of which are embodied in his great historical work. He lived in the troublous times just before the Mongol conquest, leaving his MS., which was published in 1319 A. D. by imperial command.

quered in the completion of his "Golden Work," which he brings to conclusion with great joy. He admits, as all must, that some inscriptions on ancient coins are unintelligible to him, and these undecipherable characters he dignifies with the names *Niao Wen*, "Bird Tracks," or *I Chih*, "Barbarian Branches." The most recent work of value was issued in the 15th year of Chien Lung (1751 A. D.). It was prepared by ten scholars selected by the Emperor himself, and is entitled *Ch'in Ting Ch'ien Lu*, or a "Record of Coins, prepared by imperial authority." The boards from which the work was printed were destroyed by the T'ai P'ing rebels in 1860, and the book was reissued in four volumes in 1876 by Li Kuei, a scholar who had travelled some in foreign countries. He claims to have had access to the imperial collection of coins in Peking and to have transcribed the inscriptions on all the coins recognized by the highest authorities. This work reaches in time only to the present dynasty, 1644 A. D. If his pretensions to accuracy were realized, this work would be a repertory of immense value to the student of Chinese numismatics. But, unfortunately for his claims, there are marked omissions of coins allowed by the highest foreign authority as well as by native writers. Notwithstanding the fact that Chinese libraries contain many books on coins, their lack of system and the habit they have of placing together coins of different dates and similar shape, and of altogether omitting the dates, though they give the material of which the coin is composed and its weight, make the use of their books very difficult for foreign students.

The foreign literature on the subject of Chinese numismatics is very limited. In 1852, Mr. John Williams read a paper before the Royal Numismatic Society entitled *An Epitome of Chinese Numismatics*. In June 1866, Mr. G. P. Upton of Chicago read a paper before the American Numismatic Society on the subject of Chinese currency. Both of these articles, if written at the present time, would need to be changed in several material respects. Two monographs on the coins of the Ta Ch'ing or the present dynasty have appeared in the transactions of the North China Branch of the Royal Asiatic Society. One was prepared by the late Mr. Alexander Wylie of Shang Hai, and the later one by Dr. S. W. Bushell of the British Legation in Peking. In the case of such able Sinologues, there can be little question as to the accuracy of their dates and interpretations.

With this preliminary, we may now investigate, specifically, (1) the composition of Chinese coins; (2) the mode of their casting; (3) their inscriptions; (4) their shape.

1. *The composition of Chinese coins.* In general, it may be said that they are composed of an alloy of copper and lead or of copper and zinc: sometimes a little tin is added. The formula for the coins of the Sung dynasty (960-1278 A. D.) is as follows: copper, 50 parts; zinc, $41\frac{1}{2}$ parts; lead, $6\frac{1}{2}$ parts; tin, 2 parts; in a total of 100 parts. In the time of Ch'ien Lung (1770), the Mohammedan cities under Chinese rule were allowed to coin money on condition that one-twentieth of the whole issue be presented to the Emperor. These can be readily recognized, as they are composed of a reddish alloy, copper, 84 parts; lead, $34\frac{1}{10}$ parts; tin, $1\frac{1}{10}$ parts; in a total of 120 parts. The regulation weight would be 58 grains Troy, or $3\frac{7}{100}$ grammes. But, in fact, many modern coins are under thirty grains in weight, and are frequently debased with iron. In times of special financial stress, coins composed entirely of iron have been issued, but they have never proved a great success.

2. *Mode of casting.* Chinese coins have always been cast, not struck. In ancient times, the moulds were made of stone. During the Tang dynasty (618-905 A. D.), a model of wax was made of the required shape: this model was then enclosed in an earthen matrix and was exposed to the action of heat: the wax melted and ran out of a hole left for the purpose, leaving a mould into which the molten alloy was poured. At the present time in Peking, the models are made of copper and then pressed into fine sand until there is a corresponding hollow, the sand being held in its place by wooden frames. Many coins can thus be cast at the same time. After being taken from the moulds, the coins are broken apart and are filed down to a certain degree of smoothness.⁴

3. *Inscriptions.* As the primitive mode of exchange was barter,⁵ so the first inscriptions on coins were the words or names of articles used in traffic: hence we have, as the first words cast on coins, the terms *Pu*, "Hemp Cloth;" *Pao*, "Precious Stones;" *Huo*, "Merchandise" in general; *Chin*, "Metal;" *Tao*, "Sword or Knife."

The first round money cast had no inscription whatever, and was called *Wu Tzu Ch'ien*, or "No-character-money." Following the mercantile coinage first used by Emperor Shen Nung (2700 B. C.), who first established fairs for the better exchange of commodities, we next find coins with symbolic figures on them. First in importance among

⁴ *Transactions of the North China Branch of the Royal Asiatic Society*, vol. xvi.

⁵ W. C. PRIME, *History of Coinage*, p. 3.

these is the *Dragon*, symbol of imperial dignity, also of fertility and of creative energy. It wields the power of transformation and the gift of rendering one's self visible and invisible at pleasure. Next in importance as a symbolic figure is the *Kuei* or *Tortoise*; the tortoise owes its prominence in Chinese History to the fact that it was the "Divine Tortoise" which presented to the gaze of Yu the mystic writing whence he deciphered the basis of moral teaching. The presence of the tortoise even on coins is supposed to exercise an auspicious influence. The great system of the eight diagrams used in divination was derived from the angular figures on the back of the tortoise. Third in importance as a symbolic figure on coins is the *Horse*: he symbolizes the earth, and some secret affinity between them is supposed to exist.

Ching Wang, 25th Emperor of the Chou dynasty (544 B. C.), was the first who coined round money with inscriptions. The words *Huo Pu*, "merchandise" and "cloth," formed the inscription. It is not till the year 633 A. D. that coins always have inscriptions which give the name of the reign in which they were minted, and that the exact date of the coins can be accurately ascertained. It is necessary to observe here that each Emperor has two official designations, by either of which he may be known in Chinese writings. One designation is called the *Miao Hao* or temple title, the name by which he will be known in the Hall of Ancestors. The other is the *Nien Hao* or year title, the name of the epoch or period. Every Emperor has one *Miao Hao*, but oftentimes each Emperor has several *Nien Hao*. After any special event of great political significance a new *Nien Hao* will be assumed, one Emperor having as many as nine *Nien Hao* in one reign. The *Nien Hao* is the usual inscription upon the flat round coins, and from this can be known the Emperor and the date of the issue of the coin. Thus, Jen Tsung (Sung dynasty 1023 A. D.) has the following *Nien Hao* or year-titles: *Tien Sheng*, assumed 1032 A. D. (PLATE XII-1); *Ming Tao*, (PL. XII-2); *Ching Yu*, ass. 1034 (PL. XII-3); *Tao Yuan*, ass. 1038; *Ch'ing Li*, ass. 1041; *Huang Yu*, ass. 1049; *Chih Ho*, ass. 1054 (PL. XII-4); *Chia Yu*, ass. 1056 (PL. XII-5). There is one *Nien Hao* for which we have no corresponding coin. When a new *Nien Hao* was assumed, new coins were issued to celebrate the event. But inscriptions were not confined to the obverse: on the reverse, especially of modern coins, may be found characters or numerals which indicate either the city where the coin was issued or the number in the order of its issue.

4. *Shape of Chinese coins.* Chinese coins have been issued in almost all conceivable shapes. As cloth and gems and grain were the first articles of barter, so the first coins corresponded or were supposed to correspond in shape to the things to be exchanged. Hence the oldest-known money is called *Pu* money and is shaped like a bale of cloth or, as some say, like a dress (PL. XIII-1, 2). Contemporaneous with the *Pu* coins, were coins shaped like mining tools called "Spade Cash" (PL. XIII-3). In peculiarity of form, next come the sword or knife cash. The oldest of this shape in the collection from which these coins were taken were exhumed near Peking and belonged to the time of the Lieh Kuo or feudal states during the dynasty of the Chou, 1122-249 B. C. (PL. XIII-4, 5). These two belong to the State called *Ch'ao*, which had its location about 100 miles northwest of Peking. The backs are straight like a razor, and can be easily distinguished from those with bent backs and of larger size which were issued by Han Wu Ti, 140-86 B. C. (PL. XIII-6, 7). Wang Mang⁶ (9-23 A. D.) sought to restore the coinage of the ancients, and so issued *Pu* and *Tao*, "cloth" and "sword," coins of various sizes and shapes (PL. XIII-8, 9, 10, 11). It is impossible to be absolutely certain whether some of these coins belong to this more recent issue, or are of a more ancient date, the shape and material of the two periods being the same.

But the favorite shape for Chinese money is the round flat coin with a square hole in the centre. These have passed through various transformations. First, as before stated, there was no inscription whatever, both sides were blank, and hence it was called "No-character" or "Empty money" (PL. XII-6). The first inscriptions were the char-

⁶ Wang Mang was a celebrated name in Chinese history. He lived from 33 B. C. to 23 A. D. Though reckoned among the legitimate monarchs of China, he is usually called "The Usurper." He was a man of great intellectual power, and in early life passed rapidly from one post of honor to another—when only 27 years old, he was created Generalissimo of the forces. In 2 B. C., on the death of the Emperor Ai Ti, he was installed as Regent by the Empress. He aimed to be a reformer, and made many innovations in the laws and the system of government. He restored the coinage of the ancients, made many new varieties of coins, and improved the coinage by having values stamped upon the money, as, for example, PL. XIII-10 reads *Chi Tao Wu Pai*, or "The Chi sword, value 500." This sword is only half the thickness of XIII-11, which has a value of 1000 small cash.

PL. XIII-8, 9 are a modification of the very ancient forms XIII-1, 2; and are inscribed *Huo Ch'uan*, "merchandise currency."

In 8 A. D., Wang Mang declared himself Emperor. He rapidly degenerated in character and influence, committing deeds of violence which have made his name execrable in history. He was finally torn in pieces by the soldiery, 23 A. D.

acters *Huo* and *Pu*, issued by Ching Wang 544 B. C. The next inscription indicated the weight of the coin, as *Pan Liang*, or half-ounce coins. Then there were coins of two, three, four, five or eight *Chu* in weight (PL. XII-7, 8, 9, 10).⁷ Then, the weight-inscription being dropped, the *Nien Hao* was inscribed on the obverse, the reverse being blank. The next addition was a numeral character on the reverse indicating the first, second, or third issue; or a character indicating the provincial city where the issue was made. During the Yuan dynasty (1206-1344 A. D.), Mongol characters are on some of the coins (PL. XII-11).⁸ In the present dynasty (1644 A. D.), on the obverse are Chinese characters, usually four in number, representing the *Nien Hao* and the words *Chung Pao*, or *Tung Pao*, or *Yuan Pao*, meaning respectively "heavy," "universal," "large currency." On the reverse are Manchu characters, the right-hand character giving the first syllable of the city where minted, the character at the left of the hole being the word for "currency."

Beside coins with these regular inscriptions, there are coins with curious devices on obverse or reverse or both: *Goose-eye-money*; so light that it is supposed not to sink in water: *Dragon-eye-money* (PL. XII-12, 13): *Constellation-money*; coins with seven stars united, representing *Ursa Major*; sometimes having a tortoise and sword in the field of the coin (PL. XII-14): *Zodiac-money* (Du Halde calls them superstitious coins); coins with the twelve signs of the zodiac and twelve earth-stems, used in divination (PL. XII-15): *Lotus-root-money* (PL. XII-16): *Prayer-coins*; round money with the characters *Wu Nan Erh Nu*, prayer for five sons and two daughters, the ideal Chinese family (PL. XII-17); *Chang Ming Fu Kuei*, prayer for long life, wealth, and honor (PL. XII-18); *Tien Hsia Tai Ting*, coins issued at the beginning of each reign and at each change of *Nien Hao*, with a prayer that the State may have peace and harmony (PL. XII-19).

Ancient Chinese coins are found in the *débris* of extinct cities: they

⁷ 1 *Chu* equalled 100 grains of millet in weight.

⁸ The Mongol dynasty was the first to issue paper money, called by native writers "flying paper" or "convenience money." Kublai Khan, the first Emperor really settled upon the throne, was so pleased with this method of supporting his government, that, by an overissue of paper, he ruined the business of the country, brought on great financial disaster, and ultimately the overthrow of his government. See a full account in Marco Polo.

The translation of the characters on PL. XII-11 is "Great Yuan dynasty current coin."

are also exhumed from graves: from time immemorial it has been the custom on building a temple, or any building in the imperial ground, to put a box of ancient coins in the wall under the roof. This corresponds to our custom of putting a box containing various articles in the foundation or under the corner-stone of our public buildings; a custom, in fact, that was common to all nations of antiquity. Among the Chinese, even now, ancient coins are supposed to add sanctity to the tomb, and to give a more friendly admittance to the owner into the realm of the blest. Though these coins have lost any definite financial value that they once had, yet they are put to constant use as charms worn by young children or by wives who are anxious for sons. They have a use in native materia medica; some of the most rare, ground to powder and mixed with other ingredients, being given as a panacea for human ills.

The fact that the Chinese Emperor has within the last few months established a foreign mint in the city of Canton will bring to an end the hap-hazard coining of imperfect money. If he follows the example of the Japanese Emperor, he will call in the imperfect coinage of the past and present, and will re-issue it with new patterns and with new inscriptions. As ancient coins are extremely rare and valuable in Japan, so in China the securing of these ancient coins will without doubt grow more difficult with every succeeding year.

W. S. AMENT,
Missionary to China.

[N. B. During his residence of many years in China, the Rev. W. S. Ament has made a large and extremely interesting collection of Chinese coins, comprising over 1200 varieties. It is quite possible that some institution might prevail upon him to part with it before his return to China. The collection contains also Japanese, Korean and Anamese coins. Communications may be addressed to the Managing Editor of the Journal.]

GARGARA, LAMPONIA AND PIONIA: TOWNS OF THE TROAD.

GARGARA.

The position of Gargara, the sister city of Assos, and one of the most important places in the Troad, is described, with greater or less accuracy, by ten classical authors. The earliest of these, Phileas,¹ writing in the fifth, or possibly even in the sixth century B. C., refers to Gargara as lying between Assos and Antandros. The historian Ephoros² adds that Gargara lay near to Assos. Mela (I. 18), describing the northern coast of the Gulf of Adramyttion from east to west, names Gargara as following Antandros, and brackets it with Assos. Stephanos of Byzantion (*s. v.* Γάργαρα) says that Gargara was situated upon the heights, that is to say, the range of Ida; while Hesychios (*s. v.* Γάργαρα) refers to it as in the neighborhood of Antandros. A passage found in the older editions of Soudas (*s. v.* Γάργαρα), relating to Gargara and repeating certain phrases of Stephanos, is not authorized by the codices, and has been omitted in the most recent editions of the text. It will be referred to hereafter, in connection with the eponym Gargaros.

Important information concerning a change in the site of Gargara has been preserved in the *Etymologicum Magnum* (*s. v.* Γάργαρας). We learn, from this, that the inhabitants of the town, finding their original location intolerable because of the rigor of its climate, removed from the bleak summit of the mountain to the plain at its foot—the former place being thenceforth known as *Palaia Gargara*. The nature of this change will be clear to those familiar with the topographical history of ancient settlements upon the coasts of the Aegean. It must have been commercial rather than climatic reasons which led to the removal. Before the establishment of a firm and far-reaching government, towns near the sea were constantly liable to be attacked by marauding bands from the interior, or by professional pirates. Hence, dwellers near the coast almost invariably occupied some natural stronghold, into which, on short notice, they could throw themselves for pro-

¹ The fragment in question, preserved by MACROBIUS (*Sat.*, v. 20), is derived from that section of the *Periplus* of PHILEAS entitled 'Ασία.

² *Frag.* 90: ed. Marx, p. 201: likewise preserved by Macrobius.

tection. Such citadels were frequently (as in the case of Ilion and Neandreia, in the Troad) removed several miles from the water's edge, this distance affording a security equal to that of better fortified ports, like Assos. But when, under the care of a government such as that of Rome, maritime commerce was extended and freed from danger, even unwall'd harbor-towns began to flourish, and the inhabitants of places lying some few miles inland gradually removed to the coast, where the trading-station often became of greater importance than the original stronghold, and even superseded it altogether, as in the case of Gargara. A similar movement of population has taken place during comparatively recent times. The pirates which infested the Aegean during the Middle Ages (and are not entirely unknown, even to-day, in the Gulf of Adramyttion³) long prevented the growth of unfortified ports. But under the present more favorable conditions the inhabitants are everywhere removing from their hill-tops to the sea-side. This change—familiar instances of which are the mediaeval and modern Corinth and Syra—has recently begun anew in the southern Troad. The *scala* (port) of Behram (Assos) is always crowded, while half the houses in the village beyond the akropolis are uninhabited and falling to ruin. The case is the same with Chipni-scala, Adatepé-scala, and the *scala* of Skammia. The change in the position of ancient Gargara, referred to in the *Etymologicum Magnum*, was evidently one of this kind, so that we should expect to find the original citadel and akropolis on a height at some distance from the sea; an assumption strengthened by the few words of Pliny (*Nat. Hist.*, v. 32), who speaks of Gargara, together with the mountain of the same name, as lying in the interior.

Of more importance in the identification of the site than these brief references is the account of Gargara given by Strabo (p. 606). He describes the territories of the Assians and Gargarans as being surrounded by those of the Antandrians, Kebrenians, Neandreians,⁴ and

³ In April, 1881, a small sailing-vessel which had just been captured from pirates in the Gulf of Adramyttion was offered for sale by the Turkish authorities. The bullet holes with which it was riddled bore witness to the determined fight made by its former owners. It is only of late that small and unarmed craft have been thought safe from attack in these waters. In 1826, Prokesch von Osten could not cross the strait from Molivo (Methymna) to Behram (Assos) for fear of pirates.

⁴ The identity of Neandreia with the ancient site upon the summit of Chigri-dagh has been demonstrated in a former paper: *A proto-Ionic Capital from the site of Neandreia*, by JOSEPH THACHER CLARKE, *Amer. Journ. Arch.*, vol. II, 1886.

Hamaxitans, thus making an even division which undoubtedly corresponds to the political apportionment of the southern Troad. This is shown schematically by the sketch-map, *Figure 9*. The ancient name of the province of Gargara, ἡ Γαργαρίς, has been handed down to us by Strabo (p. 610), and by the Scholiast to the *Iliad* (iv. 292). In another passage (p. 606), Strabo states the distances of Polymedeion,⁵ Assos, and Gargara from Lekton—that land's-end of the Troad: Μετὰ γὰρ τὸ Λεκτὸν τὸ Πολυμήδειον ἔστι χωρίον τι ἐν τετταράκοντα σταδίοις, εἴτ' ἐν ὀγδοήκοντα Ἄσσοις,⁶ μικρὸν ὑπὲρ τῆς θαλάττης, εἴτ'



FIG. 9.—Political Division of the Southern Troad.

⁵ The site of Polymedeion has been discovered by me at a place called Assarlik, on the seashore, three kilometers west of Cape Sivridji. The very considerable ruins of this fortified town were carefully surveyed, and some excavations were made, the results of which will be published in another paper. An interesting peculiarity of Polymedeion is that a sacred grove occupied the centre of the akropolis, in place of the customary temple.

⁶ All the earlier editions of STRABO here read ἄσσοι for Ἄσσοι. The self-evident emendation was made by C. MANNERT (*Geographie der Griechen und Römer*: Leipzig, 1829-31, third ed.) in 1787; but ἄσσοι was retained in the text as late as the publication of the Oxford edition of Strabo, 1807, vol. II, p. 872.

ἐν ἑκατὸν καὶ τετταράκοντα Γάργαρα. Although these words are not free from ambiguity, it still seems natural to take the distances named to be those of the respective towns from the starting-point, Lekton, as has been done by the old Italian translator, Buonacciuoli (Venice, 1562-65), by the authors of the excellent French version made by order of Napoleon I (Paris, 1805-19), by the English translators Hamilton and W. Falconer (London, 1848), and by J. A. Cramer.⁷ If this reading be adopted, we have in the sixty stadia from Assos to Gargara an accurate statement of the distance from Behram to the ancient site now identified as Gargara. But a different view of the passage is taken by Xylander in his Latin translation of the text (Basle, 1571); and is adopted in the editions of Casaubon (Geneva, 1587), Almeloveen (Amsterdam, 1707), and Siebenkees-Tzschucke (Leipzig, 1796-1818), as well as by Penzel in his German version (Lemgo, 1775-77), by Gosselin in his notes to the beforementioned French version, and by Grotefend⁸ and Schliemann.⁹ These writers understand the given numbers to be cumulative, the distance from Gargara to Assos thus being one hundred and forty stadia, and from Gargara to Lekton not less than two hundred and sixty stadia.¹⁰

Fortunately for the identification of the site, as well as for the understanding of the true meaning of this passage, Strabo subsequently (p. 606) makes a statement which independently assures the position of two important points. He asserts that Gargara (the port) was situated upon a cape which marks one limit of the Gulf of Adramyttion, the other, upon the south, being a certain Cape Pyrrha. A glance at the exceedingly accurate Admiralty Chart of this region¹¹ will at once show that the natural boundaries of the inner gulf are Cape Qaterga,¹² to the

⁷ *A Geographical and Historical Description of Asia Minor*: Oxford, 1832.

⁸ In PAULY, vol. III, s. v. *Gargara*.

⁹ *Reise in der Troas*: Leipzig, 1881, v; and *Troja*: London, 1884, appendix 1.

¹⁰ Other translations still, such as the first Latin version of Guarini and Tifernas (Basle, 1472), the latest, in Müller's edition (Paris, 1853-58) and the German renderings of Kaercher (Stuttgart, 1829-36), Groskurd (Berlin, 1831-34) and Forbiger (Stuttgart, 1856-58), reproduce the Greek phrase in so literal a manner as to convey no opinion in regard to the way in which it is to be understood. Nevertheless, Müller, on the map given with his edition (pl. x) marks in figures the distance from Assos to Gargara as one hundred and forty stadia, and thus commits himself to the latter view. Ambrosoli's Strabo (Milan, 1828), which would, I believe, complete the list of editions and translations, has not been accessible to me.

¹¹ Mitylini Island, with the Gulfs Adramyti and Sandarli, surveyed by Capt. Richard Copeland, 1834, Admiralty Chart, No. 1665.

¹² Qaterga-bournou, "the mule's cape," is called, upon the Admiralty Chart, Kata-

east of Assos, on the one hand, and, on the other, the extremity of the island of Pyrgos, one of the Hekatonnesoi,¹³ which is separated from Mosko, as this is from the mainland, only by channels a few meters in width. It is evident that no other promontories can have been meant by Strabo, and it is further to be noted, in confirmation of this identification, that the distance between these capes is exactly equal to the one hundred and twenty stadia which he specifies. Hence it appears probable that the sailing distances were derived by Strabo from another and more trustworthy source than the length of the roads, or that, at least, the former have not been corrupted by the transcribers' errors which may be assumed to have rendered the above passage obscure.

Gargara appears upon the Peutinger Table (ed. Mannert, pl. VIII. f), being indicated as of even greater importance than Assos: the two towers which mark chief stations being drawn against the name of the former, but not against that of the latter town. In regard to the given distances, the existing copy of this itinerary, as is well known, is full of errors. But that the original may have been correct in its estimates of the lengths of the road running along the southern coast of the Troad appears probable from the agreement of the stated distance from Sminthe

gar Point. May it not be supposed that this whimsical name was, like so many others, derived from the similarity of sound of the Turkish word to the Greek Gargara, which town is known to have been in existence at the time of the Ottoman conquest. Such, for instance, is the derivation of the name of the river Menderé, an evident corruption of Scamander, and of Balikesri (signifying "the place of the fish," although far inland) from Palaia Kaisareia. Leaving the Troad, a familiar example of such an adaptation from the Greek is to be found in the name of Stamboul itself.

¹³The islands of Apollon Hekatos; compare Strabo, p. 618: now known as the Moskonisi, from the largest of their number. The ancient Cape Pyrrha is identified by GOSSELIN, in his notes to the above-mentioned French translation of Strabo, with Qara-tepé Bournou. In this he is followed by the Admiralty Chart. SMITH's *Ancient Atlas* places the cape still farther to the east, within the gulf, at a point called Dahlina. STRABO (p. 606) says that a temple of Aphrodite stood upon Cape Pyrrha. Misled by the maps, I made in 1882 a thorough search for ancient remains upon the Qara-tepé, discovering no traces whatever of Hellenic buildings upon this promontory. Unfortunately, I did not land at Pyrgos, to which place the attention of future investigators should be called. The name itself promises the existence of some ancient structure.

The correct identification of Cape Pyrrha is of importance as determining the site of the ancient city of Kisthene, which, in its turn, lends weight to the arguments brought forward in the text. We learn from STRABO (p. 606) that Kisthene was just outside the gulf, beyond Cape Pyrrha, and that it had a harbor. This corresponds exactly with the position of the flourishing modern town of Aivaly, which has the only haven upon this entire coast. MELA (I. 18) speaks of Kisthene as a very con-

to Assos, and from Antandros to Adramyttion, with the actual facts. The existing copy reads :

Sminthion-Assos,	XV.
Assos-Gargara,	XXIII.
Gargara-Antandros,	XVI.
Antandros-Adramyttion,	XVI.

whereas the true distances, measured along the highroads, and expressed in Roman miles, are approximately :

Sminthion-Assos,	XV.
Assos-Gargara,	VIII.
Gargara-Antandros,	XXI.
Antandros-Adramyttion,	XVI.

In manuscripts of this kind, copied and recopied by mediaeval scribes, it is commonly some change in the denomination, rather than in the number of the signs, that forms the chief source of error. Hence we may venture the supposition that it was the monk of Colmar, in the thirteenth century, or some earlier copyist, like him ignorant of the actual distances, who wrote XVI for an illegible XXI, and, retaining the last four signs correctly, XXIII for VIII. At all events, the figures as

siderable place; and it is certain that it cannot have been situated at any point on the gulf within Cape Pyrgos, where the only ancient remains are those of insignificant villages, altogether without harbors, among which must be the ancient Passanda, mentioned by STEPHANOS of Byzantium, *s. v.* Πάσσα, as lying between Kisthene and Adramyttion. STRABO refers to Kisthene as having been in ruins in his day, as does also PLINY (*v.* 30). As it is not known with certainty from whom Mela took his account of this coast, it is impossible to determine at what period the city was destroyed. But, if the supposition be correct that the Roman geographer took this portion of his work, like so many others, from Eratosthenes, we should be justified in ascribing the reduction of Kisthene to the Pontian army which occupied this district during the first Mithridatic war. This view receives some confirmation from the fact that while we possess autonomous coins of Kisthene dating to the second century B. C. (compare BORRELL's paper in the *Numismatic Chronicle*, vol. VI: London, 1843) no subsequent mintage is known to have existed.

Aivaly—famous in the history of the war of Greek Independence as a city of thirty thousand inhabitants destroyed in a single day (June 15, 1821)—is built upon the ruins of some ancient town of considerable extent. Its great natural advantages, and in particular its safe and commodious harbor, render it the most commanding site in the neighborhood, and the only one that can be identified with the *clarissima Cistena* of Mela. No geographer personally acquainted with this region could place Kisthene upon the coast farther to the east, within the gulf, as has been done in SMITH's *Ancient Atlas*, and by PRELLER (in PAULY, *s. v.* *Cisthene*), and FORBIGER (*Geographie*, vol. II; and *Translation of Strabo*, vol. VI), the last two identifying it with a village called by them Chirin-kioi (Harein-kieu?).

they stand in the copy which has come down to us are incorrect, not only severally, but in their sum total; the road from Assos to Antandros being thirty, not forty miles in length.

Of most decisive importance in the identification of the site of Gargara is the table of longitudes given by Ptolemy in his Geography (ed. Nobbe, v. 2. 5). As the southern coast of the Troad trends so nearly west from Lekton, the latitude does not here concern us, while the fractions of a degree measured on the parallel can be employed directly in calculating the distances between the given points. Ptolemy's longitudes read:

Λεκτὸν ἄκρον	ῥε γο'
Ἀσσον	ῥς —
Γάργαρον ¹⁴	ῥς ς'
Ἀντανδρος	ῥς α'

It would be impossible, without the introduction of smaller fractions than the great astronomer has used in this work, to more accurately indicate the positions of these places, the longitudes of which, east of Greenwich, are actually:

Cape Lekton,	26° 4.5'
Assos,	26° 21'
Gargara (Qozlou-dagh),	26° 27'
Antandros,	26° 46'.

Ptolemy, taking the longitude of Alexandria (from Greenwich 29° 51.5' east) as the standard for his 60° 30', makes, it is true, the error of mapping all the upper portion of the peninsula of Asia Minor too far to the west, the deviation amounting in the case of the Troad to fully one degree: but, in all that concerns the present identification, the relative positions of the towns, made evident by the fractions above quoted, may be taken as a convincing proof.¹⁵

The ruins of Gargara have hitherto been unknown to modern investigators. The only attempts to determine the site of the town have been those of Gosselin, Forbiger, and Schliemann. Gosselin¹⁶ remarks

¹⁴ Various written in the manuscripts: Ἰδργαρον, Ἰαρίανον, and Ἰαρίανον.

¹⁵ To the ten ancient authorities, mentioned in the text as having described the position of ancient Gargara, might be added, as an eleventh, the ANNOTATOR to Ptolemy (Cod. Paris. 1401, 1402, *marg.*; given in Wilberg's edition of the Geography: Essen, 1838-45), who, after mentioning Polymedeion, which does not appear in Ptolemy's list, refers to Gargara as being farther along the coast. The Annotator also repeats the testimony of Strabo as to the Gulf of Adramyttion being bounded by Capes Gargara and Pyrrha.

¹⁶ In his notes to the French translation of Strabo, previously referred to.

that Gargara must be sought for near the headland on which is situated the village of Iné—an absurd statement, as the town of Iné (more properly Eziné) is in the very centre of the Troad, at the juncture of the rivers Skamandros and Kebren. The opinion of Gosselin is adopted by Cramer¹⁷ and Schmitz.¹⁸ Forbiger¹⁹ states that Gargara is “near Tchepini;” this name evidently having been taken at random from some modern map of the southern coast, for Chipni (as it is more correctly written) lies almost as near to Antandros as to Gargara. Schliemann²⁰ places Gargara upon the seashore, at a spot four hours’ ride from Assos, reckoning this distance to be equal to the one hundred and forty stadia which he understands Strabo to give as that between Gargara and Assos. In the original publication of his note (*Reise in der Troas*, 1881), Schliemann makes no mention of the ruins as being upon a cape, and, in fact, the coast is here almost perfectly straight. But, in republishing the account of his journey (*Troja*, 1884), he has made the site agree the better with Strabo’s description of Gargara, by stating that the ancient remains in question are situated “close to a promontory called Pyrrha, under (*sic!*) which stands the temple of Aphrodite.” Cape Pyrrha, to which reference has already been made, is really upon the opposite coast of the gulf, and forms no part of the Troad.

The extensive ruins which I would identify as those of ancient Gargara were discovered by Mr. Diller, the geologist of the Assos Expedition. They lie upon the summit of the mountain of Qozlou, at a distance of three kilometers from the coast, ten kilometers east-northeast from the akropolis of Assos. Qozlou-dagh is a spur of the main range of Ida, formed by the extrusion of a great dike of andesite and conglomerate. A bold ridge is thus formed, the highest point in the neighborhood, rising more than three hundred meters above the level of the sea. The northern slope of this mountain is gradual, but upon the south it rises in high cliffs from the fertile fields that extend to the water’s edge. Mr. Diller has described the geological formations which determined the peculiar shape of the mountain.²¹ At its eastern ex-

¹⁷ *Description of Asia Minor*, already quoted.

¹⁸ In SMITH, *s. v.* Gargara.

¹⁹ *Handbuch der alten Geographie*: Leipzig, 1842-44.

²⁰ In the two works whose titles have been given above, Note 9.

²¹ *Notes upon the Geology of the Troad*, by J. S. DILLER; appendix iv to *Report on the investigations at Assos, 1881*, by J. T. CLARKE: Boston, 1882. Throughout this paper Diller refers to Qozlou-dagh as the site of Lamponia, and to Qojekia-dagh as

tremity, the andesite rests directly upon the upper strata of an older tertiary. The strike of this underlying bed, approximately east and west, is parallel with the general trend of the mountain, while its dip is northerly, corresponding to the fluidal structure of the superimposed andesite. The slope of the extended mass is in some places very gentle; thus it forms a small plateau upon the mountain-top, near the western extremity of the ridge, offering a secure and commodious site for a large city.

The tract enclosed within the walls of ancient Gargara is of irregular shape, elongated in the direction from north to south. A small sketch-plan is given in *Figure 10*. This cannot pretend to absolute accuracy, as no survey was made, and the site was found so thickly overgrown with bushes that it was difficult to follow out the directions and relations of the walls. The enclosure was divided into two chief parts by a broad and shallow gully, running through the middle of the town in a direction from east to west. The higher division, rising from the lower tract in almost vertical rock-walls, formed the akropolis. This was itself divided into two terraces, *A* and *B*, *Fig. 10*, the most northerly being the higher. The lower town, *C*, rises gently toward the south. The entire enclosure is nearly as large as that of Assos, and may be some eight hundred meters in length, from north to south. The akropolis is much larger than that of Assos.

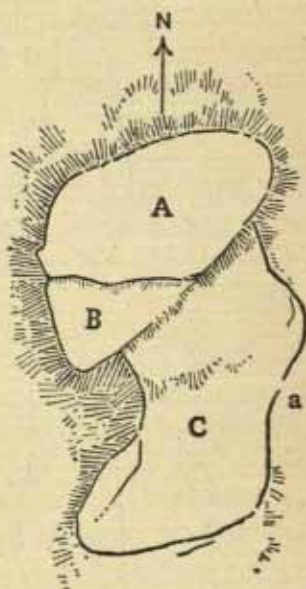


FIG. 10.—Sketch-plan of site of Gargara.

The circuit of the town is fortified by walls of polygonal stones, still standing, in places, to a height of eight meters. The character of this interesting masonry is shown in the scale-drawing, *Figure 11*.

the site of Gargara. I alone am responsible for the errors involved in this interchange of the names. The correct identification of the sites was not made till after the close of the first year's work at Assos, and the publication of the preliminary report. Hence, also, the names of Lamponia and Gargara are interchanged upon the sketch-map given in that volume, pl. 4 a. Furthermore, the name Pyrrha is assigned (as in all previous maps) to a cape upon the mainland, too far to the east.

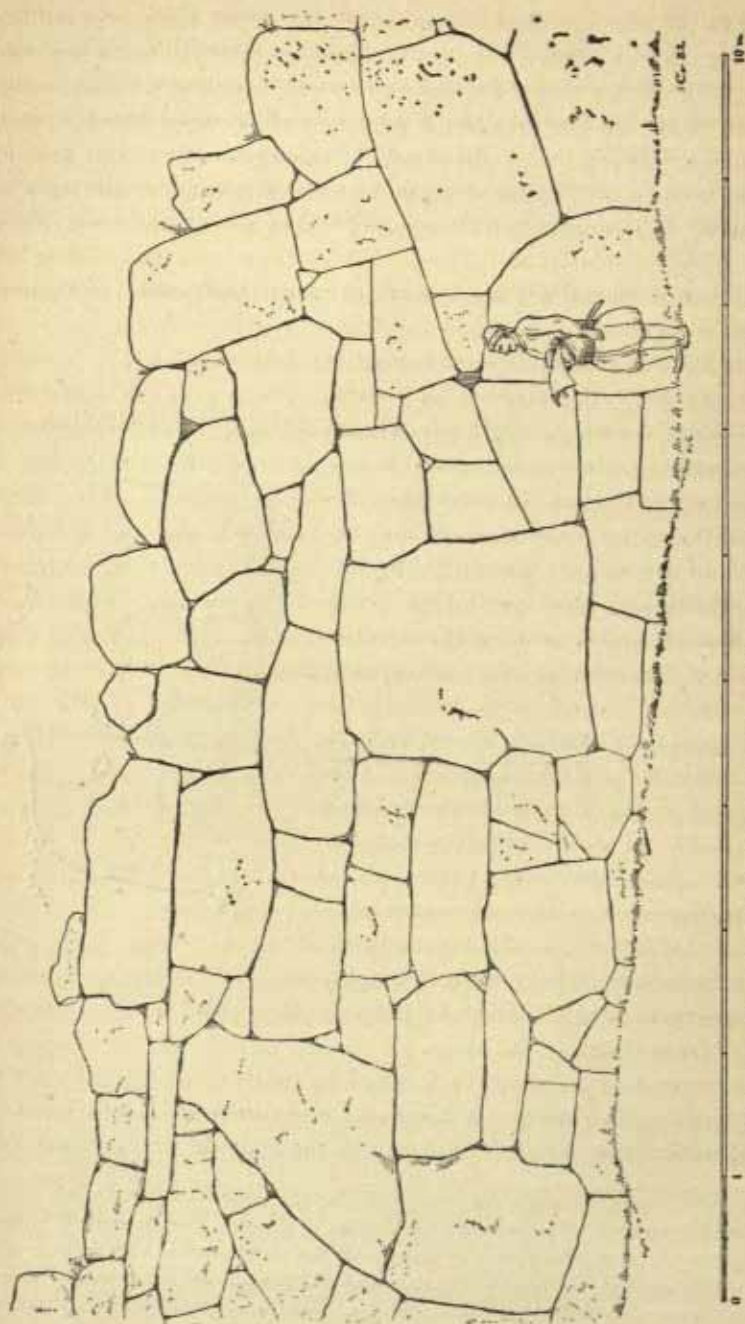


FIG. 11.—Masonry of walls of Gargara: Stones of the enclosure, eastern circuit, near *a* in Figure 10.

Some of the gigantic blocks, a meter or more thick, have faces not less than two meters square. The counterscarp is visible in but few places, where it indicates that the entire thickness of the wall was fully seven meters. The ashlars are rudely split to a plane face: between these the masonry is carelessly piled in, little attention having been devoted to any system of bonding, which was, indeed, scarcely necessary in masses of this enormous thickness. It is apparent that most of the stones were boulders, removed from within the enclosure, and that but few, even of the ashlars, were obtained by quarrying from the native rock. Considerable pains and ingenuity are evident in the tooling of the joints to straight lines. The obtuse reëntering angles, so frequently occurring, were evidently cut after the block was in position, and that which was to adjoin it had been determined upon. Long stretches of the fortifications are completely ruined, and form a belt of *débris* from ten to twelve meters broad. The circuit can, however, be traced; indeed the lower town has been used in modern times as an extensive goat-fold, a low wall being piled up on top of the dike formed by the overthrown materials of the ancient walls. Those portions of the walls which still stand erect are more or less out of the vertical, having been shaken by the earthquakes so common in this region. Usually the less carefully built counterscarp has given way, and the outer face leans backwards very noticeably. At the point designated *a* on the sketch-plan, *Fig. 10*, can be traced the position of a large portal, passing obliquely through the wall in a southwesterly direction. This was, without doubt, the chief entrance to the town, corresponding to the natural approach from the port on the south and from the high-road winding along the coast between Assos and Antandros.

The akropolis is separated from the lower town by a retaining wall, reaching a height of six meters, which is built at those points on the northern side of the gully where a natural fortification was not formed by cliffs. In like manner the two distinct terraces of the akropolis, *A* and *B*, were separated by low retaining walls. All this masonry is of the same character as the outer rampart, and is apparently contemporary with it.

Little can be said concerning the ruins within the walls. The ancient buildings have been levelled to the ground, covered with earth, and overgrown by the hardy vegetation of the Ida range. Here the appearance of the site is not unlike that of Neandreaia. Both of these mountain fastnesses were deserted by their inhabitants before the period

when numerous monumental edifices were to be found even in the poorer provincial towns of the Greeks. No columns rise from the field of ruins to mark the chief centres of civic life. The aspect of this waste, forgotten by mankind, but still guarded by these stupendous fortifications, is almost mysterious in its hoary antiquity.

Ancient Gargara, like Assos, must have depended almost wholly upon cisterns for its supply of water. A number of such reservoirs are to be seen within the walls. One, in particular, an enormous natural depression, skilfully adapted to this purpose, must have been capable of holding enough water to supply the entire town for a twelve-month. A little lower down, upon the southern side of the mountain, flow several streams: the rich green foliage of the fields which they irrigate forms a brilliant patch in the landscape, framed as it is in the steel-gray and purple expanse of volcanic rocks. The slope of Qozlou is thus a landmark for the mariner, and may be distinguished, by a familiar eye, as far as from the southern extremity of the strait which separates Lesbos from the mainland of Pergamon, a distance of thirty miles or more. These fertile fields might by more careful cultivation be made exceedingly productive: as it is, almonds, figs, quinces, pomegranates, and every variety of grain and garden-produce grow abundantly. Throughout this district the luxuriance of the vegetation bears witness to the richness of the soil, so celebrated by ancient writers; for Gargara was renowned in this respect not only amongst the Greeks, but throughout the wide empire of the Romans. The town became typical of the extraordinary fertility of Mysia. Its situation upon the well-watered slopes of Ida seemed to assure a full harvest, even in the most droughty summer. This, according to the exegesis of the ancients themselves,²² is the sense in which we are to understand the somewhat obscure lines of Vergil (*Georg.*, I. 100):

*Humida solstitia atque hiemes orate serenas,
Agricolae; hiberno laetissima pulvere farra,
Laetus ager; nullo tantum se Mysia cultu
Jactat, et ipsa suas mirantur Gargara messis.*

Nor is this the only tribute paid to the fertility of the Gargaris by the poets of distant Italy. Ovid, in an extravagant parallel (*Ars Am.*, I. 56), takes the crops of Gargara, together with the fishes in the sea and

²² An entire chapter of MACROBIUS (*Sat.*, v. 20) is devoted to the elucidation of these lines of Vergil.

the stars in the sky, as an image for a countless multitude; while Seneca gives expression to the same idea (*Phoen.*, iv. 608):

*Hinc grata cereri Gargara, et dives solum,
Quod Xanthus ambit nivibus Idaeis tumens.*

Indeed, if we may believe Macrobius (*Sat.*, v. 20), the plenty of these parts was so great that the very name of Gargara became synonymous with superabundance. Thus, Alkaios, in his *Κωμφοδοτραγῳδία*,²³ has the expression *Γάργαρ' ἀνθρώπων* for a great concourse of men. The fact that this writer of comedies, like his better-known namesake the lyric poet, was a native of the neighboring island of Lesbos may perhaps account for his familiarity with the agricultural conditions of the southern Troad. But a wider fame is attested by a similar use of the phrase by the Attic Aristomenes,²⁴ and by the ludicrous composite word *φαρμακοσιογάργαρα*, used by Aristophanes (*Ach.*, 3) to signify a "numberless numerosity," as it is explained by the ancient commentator.²⁵ Nevertheless, it may be doubted whether the noun *γάργαρα*, as well as the verb *γαργαίρω* (to swarm), should not be derived from some purely etymological root, which itself tended to increase the fame of this Trojan province in respect to fertility.

The small village of Qozlou, about a kilometer from the ruins, is shaded by wide-spreading walnut trees, seldom seen in the Troad, the Turkish appellation for which (*qoz*) has given the name to both village and mountain. Qozlou to-day consists of some thirty stone cabins and a small mosque. It is entirely Turkish, there being but a single Greek in the place—an old man who has lived there for years, widely known for his skill in weaving the coarse haircloth from which bags for valonea and grain are made. The mountain above is uninhabited, save by a family of Yuruks, who in April and May pitch their tents upon the site of ancient Gargara, before ascending the cooler heights of Ida, which in the summer months provide pasturage for their cattle. The bridle-path from Qozlou to Aivadjyq passes the eastern walls of the deserted city, descending upon the north into the deep gorge where flows the Touzla-sou (the ancient Satnioeis), hemmed in by the conglomerate cliffs of the mountain.

The site of the settlement upon the coast, the "modern town" of Strabo (p. 583), is recognizable in an extensive field of ruins, situated

²³ Preserved by MACROBIUS, in the chapter before quoted.

²⁴ Fragment from the *Βοηθολ* of ARISTOMENES, preserved by Macrobius.

²⁵ MACROBIUS, *Sat.*, v. 20.

at the foot of the slope on which lies the Turkish town of Sazly. This new town, at a distance of about four kilometers from the citadel, occupied a level tract close to the sea, and does not appear to have been enclosed by walls. The site is strewn with sherds of coarse Byzantine pottery, which prove it to have been inhabited until a comparatively recent date. Vestiges of the Roman period also abound. Monolithic columns of andesite, one of which still stands erect, and the lower courses of ancient walls, seem to show that some buildings which cannot have been much more recent than the Christian era remained in use until the town was destroyed and deserted.

New Gargara certainly did not lie upon a cape, and thus belies Strabo's account. But, as before mentioned, it may be seen, from any good map of the coast, that no promontory whatever is to be found upon the entire northern coast of the Gulf of Adramyttion, east of Qaterga-bournu. It has already been shown that Qaterga is the point from which Strabo measures the width of the gulf, and that it was known in antiquity as Cape Gargara. The geographer thus appears to have fallen into the natural error of identifying the site of the new town with that of the cape of the same name; even as ancient Gargara has been frequently described by modern writers as situated upon the peak of Ida known as Gargarus, which is in reality still further distant from the citadel. The names Gargara and Gargaros—used interchangeably²⁶ and derived, as the ancient lexicographers²⁷ inform us, from the bubbling of the many streams which rise in this part of Ida—were applied to the highest point of this range, and to the cape which may be regarded as its termination. In this connection, it is interesting to note that the ancients bestowed upon the chief peaks of Ida the names of the chief capes of the Troad—evidently identifying the spurs of the mountain with the promontories which formed their extreme limits, and were most familiar to the seafaring Greeks. This conception is clearly exemplified by a passage of Strabo (p. 583), who explains that, as Homer says (*Il.*, xiv. 283), Lekton is part of the Ida range, inasmuch as those who approach it from the sea here begin the ascent.

²⁶ Upon this point, compare the remarks of Macrobius, in the chapter before quoted. The general usage of antiquity seems to have followed the rule laid down by Epaphroditos, in Stephanos of Byzantium, s. v. Γάργαρα, that the name of the mountain should be neuter, and that of the town feminine.

²⁷ *Etymologicum Magnum*, s. v. Γάργαρα: SCHOLIAST to the *Iliad*, viii. 48; xiv. 284. W. PAPE (*Wörterbuch der griechischen Eigennamen*, third ed.: Braunschweig, 1863-70) somewhat affectedly renders the name of Gargara as "Schluckenau" or "Menede."

Thus, Tzetzes twice states (*Scholia ad Lykophr.*, 24 and 1170) that the heights of Ida are four: Phalakra, Lekton, Gargaron, and Pergamon. It is manifest that the last of these names, that of the akropolis of Troy, is to be taken for the northwesternmost point of the Troad, a supposition which is confirmed by the Scholiast to Nikandros (*Alexipharm.*, v. 40), who calls the four peaks of Ida, Phalakra, Lekton, Sigeion, and Gargaron.^{27a} Such an interchange of names was the more natural to the Greeks, as in their language one and the same word served to designate a peak, a cape, and a frontier.

The summit of the Ida range, called Gargaros, is mentioned four times in the *Iliad*. Here Zeus had a sacred temenos and a fragrant altar (VIII. 48). Hera is represented as ascending this height from Lekton (XIV. 292); and here Zeus sleeps after his intercourse with her (XIV. 352). Here, also, Zeus sits enthroned while giving commands to Iris and to Apollon (XV. 152). In the estimation of the poet, who was so intimately acquainted with all the natural features of the Troad, Gargaros was one of the very topmost peaks of the entire range. This is evident, not only from its being repeatedly called the ἄκρον of Ida, but from the fact that, in the passage first quoted, Zeus is represented as viewing from it the city of Troy. It is perfectly possible to distinguish the hill of Hissarlik from the summit of Qazdagh, but by no means so from Qozloun-dagh, the view from which is intercepted on the north by the higher ground which forms the watershed between the valleys of the Satnioeis and the Kebren. A passage from the *Τρωες* of Epicharmos²⁸ bears the same construction: the peak of Gargaros, the seat of all-powerful Zeus, is here spoken of as snow-capped, an epithet which might be poetically applied to the summit of Ida, but certainly not to the site of ancient Gargara.

Reference to the altar of Zeus upon Gargaros is also made by Lucian (*D. Deor.*, IV. 2), who elsewhere speaks of the mountain as that upon which Zeus descended while carrying off Ganymedes (*Charid.*, VII), and again as the spot where Paris was tending his herds when called upon to adjudge the prize in the memorable competition of the goddesses (*D. Deor.*, XX. 1). It is evident, from the dialogue last quoted, that the name *Gargaros* was not restricted to the peak. Lucian makes Hermes say, in pointing out the whereabouts of the favored shepherd:

^{27a} The SCHOLIAST to the *Iliad* (VIII. 48; XIV. 284) is acquainted with but three of these cape-peaks: Lekton, Gargaron, and Phalakre.

²⁸ Preserved by MACROBIUS, in the chapter before quoted.

"Here, Hera, to the left, not on the top of the mountain, but on the slope, where you see the cavern and the cattle" (*D. Deor.*, xx. 5). Topographical evidence to the same effect may be derived from a passage of Ovid (*Her.*, xvi. 107), where Paris speaks of having built his ship from timber cut upon Gargara—the lower slopes of the mountain, of course, not the treeless summit.²⁹

That, finally, the town of Gargara, although situated neither upon the cape nor upon the mountain itself, but between the two, nevertheless received its name from them, is especially affirmed by Strabo (p. 583), who, referring to the peak of Ida mentioned in the above-cited lines of the *Iliad*, relates that, even in his day, a spot called Gargaron was pointed out in the highest part of the range, and that it was from this that the Aiolic settlement was named. This derivation of the name of the town is undoubtedly the true one. The southern slopes of this mountain-chain—a limestone formation—abound in springs of deliciously clear and cool water, so rare in this part of the world that they have been famed from the most remote antiquity. They fully justify the epithet *πολυπῖδαξ* frequently bestowed upon Ida by Homer. Strabo (p. 583) remarks, that it is particularly upon this southern side that the range is well watered, while Pliny (*Nat. Hist.*, v. 32) has given us the names of no less than five of the streams which flow into the gulf on the short stretch of coast between Adramyttion and Gargara.³⁰ It is therefore not surprising that this range, as well as the cape which terminates it, and the chief town of the province, took their names from the onomatopoeic Greek word which corresponds to our "gurgle."

The natives of Gargara, however, in evident reminiscence of the Leleges who preceded them, and of the Aiolians who colonized this region,³¹ traditionally ascribed the foundation of their town, and the

²⁹ Besides the authorities mentioned in the text, the peak of Gargara is referred to by LUCIAN, *Charid.*, vii; the PSEUDO-PLUTARCH, *De flux.*, xiii. 3, p. 26, ed. Hudson; the SCHOLIAST to the *Iliad*, vii. 48, xiv. 284, 292; HESYCHIUS, s. v. *Γάργαρα*; TZETZES, *Scholia ad Lykophr.*, xxiv; STATIUS, *Theb.*, i. 549; and by the ancient writers quoted by STEPHANOS of Byzantium, in the *Etymologicum Magnum*, and in the chapter of MACROBIUS, so frequently mentioned in the course of this paper.

³⁰ The modern names of these rivers appear to be: Astron (near the town of Astyra) = Takhte-sou; Kormalos (near Antandros) = Papazly-sou; Eryanos = Mykhly-sou; Alabastros = Chipni-sou; Hieros (at the foot of Lamponia) = Moussouratly-sou. The number of small streams which flow in this district is so great that an assured identification is scarcely possible in the cases of the two last named.

³¹ That Gargara, like Assos, was a colony of the Aiolians, is attested by STRABO (p. 610) and by MELA (i. 18).

origin of its name, to an eponymous hero, Gargaros, son of Zeus by Larissa the eponyma of the Thessalian capital.³² This Larissa is described as the daughter of a Pelasgian prince called Piasos,³³ or even as the daughter of Pelasgos himself.³⁴ Such is the mythical version of actual facts relating to the origin of the inhabitants of Gargara. In their first ancestor, Pelasgos, we have a clue to the foreign element which mingled with the Greeks of the southern Troad. The eponym Gargaros is a representative of that great movement of Thessalian aborigines to which Dionysios of Halikarnassos (I. 18) refers when he says that the Pelasgians, on being driven out of Thessaly, crossed over into Asia, and took possession of many cities on that coast. In the town of the southern Troad called Larissa,³⁵ which is spoken of in the *Iliad* (II. 841) as inhabited by Pelasgians, we have even more direct evidence of the existence, in the country, of that race which the author of the Homeric poems ranks together with the Leleges (II., x. 429). It is known that the primitive inhabitants of the northern coast of the Gulf of Adramyttion were Leleges, their capital being Assos, then known as Pedasos,³⁶ under which name it is described in the *Iliad* (VI. 34; XXI. 87). The neighboring city of Antandros, spoken of as Pelasgie by Herodotos (VII. 42) and Konon (*Dieg.*, 41), is likewise asserted to have been a stronghold of the Leleges,³⁷

³² This is without doubt the sense in which we should take the manifestly corrupt passage of STEPHANOS of Byzantion, s. v. Γάργαρα: ἀνομάσθη δ' ἀπὸ Γαργάρου τοῦ Διὸς, τοῦ ἐκ τῆς Θεσσαλίας, ἐν Λαρίσσει. In SOUIDAS, s. v. Γάργαρα (ed. Kuster, vol. I: Cambridge, 1705), this sentence is found in the following form: ἀνομάσθη δὲ ἀπὸ Γαργάρου τοῦ Διὸς καὶ Λαρίσσης τῆς ἐν Θεσσαλίᾳ. It is, however, not to be found in the MSS. of Souidas, and has been omitted from the more recent editions of Gaisford (Oxford, 1834), Bernhardt (Halle, 1843-53) and Bekker (Berlin, 1854). As may be gathered from the version of the tradition preserved in the *Etymologicum Magnum*, s. v. Γάργαρος, it was derived by these compilers from the Περικλούς 'Ασίας of NYMPHIS, the historian, among the fragments of whose works (ed. Müller) it appears as No. 10. The *Etymologicum Magnum* refers the information to "Nymphios, the philosopher."

³³ STRABO, p. 621; SCHOLIAST to Apollonios of Rhodes, I. 1063, quoting Apollonios and Neanthes; NIKOLAOS of Damascus, frag. 19; SOUIDAS, s. v. Ἀθήμωρα; PARTHENIOS, *Erot.* 28.

³⁴ PAUSANIAS, II. 24.1; SCHOLIAST to Apollonios of Rhodes, I. 40, quoting Hellanikos.

³⁵ The site of this town, which is referred to by many ancient writers, has been identified by CALVERT (*Archaeological Journal*: London, 1861, vol. XVIII) with the ancient remains upon the Liman-tepe, near Kieussederessi.

³⁶ The identity of Pedasos and Assos has been demonstrated by me in the *Report on the Investigations at Assos, 1881*, before quoted.

³⁷ ALKAIOS, quoted by Strabo, p. 606. A similar identification of Leleges and Pelasgians is made by STEPHANOS of Byzantion, s. v. Νωδῆ.

as, indeed, all the towns of this coast are known to have belonged to the Leleges in the time of Homer.³⁸ The fusion of this race with the Aiolic immigrants accounts for the assertion of the Scholiast (xx. 96), that the Hellespontine (Trojan) Leleges had themselves come from Thessaly. And thus, also, it becomes clear in what sense we are to take the remark of Herodotos (vii. 95) that the Aiolians were at first called Pelasgians by the Hellenes. The barbarians who originally possessed the southern Troad were gradually transformed by the influence of the Greek culture of the Thessalian colonists, and merged into the Greek stock—not, however, without indelibly stamping the peculiarities of their race upon their Hellenized descendants: witness the craniological characteristics retained by the inhabitants of Assos as late as the ages of Roman dominion.³⁹

In regard to Gargara, we have direct ancient testimony, preserved by Stephanos of Byzantion and in the *Etymologicum Magnum*, that the town was inhabited by Leleges. And, at a period long subsequent to the Aiolic migration, an event occurred which must have greatly increased the Lelegeian character of the place. We learn, namely, from a fragment of the *Τρωικός διάκοσμος* of Demetrios of Skepsis⁴⁰—the loss of which work cannot be sufficiently deplored by the student of Homer and of the Troad—that the Kings (of Persia), finding Gargara poorly populated, recolonized the place with natives of Miletos, after having destroyed the latter city. So great a predominance was hereby given to the foreign element of the population that Demetrios complains (and here we may perhaps recognize the jealousy of a rival town naturally felt by a good Skepsian) that the citizens of Gargara had been transformed from Aiolians to semi-barbarians. That Miletos, famed even in Homeric ages (*Il.* ii. 867) as the seat of a race (Karians or Leleges⁴¹) speaking a tongue foreign to the Greeks, was a chief centre

³⁸ STRABO (p. 611) makes special remark of this fact.

³⁹ The striking hypsibrachycephalism of the skulls from Assos examined by VIRCHOW (*Alte Schädel von Assos und Cypern*: Berlin, 1884) is only to be accounted for by the inheritance of race characteristics from the Leleges. Compare my Review of Virchow's work in the *Amer. Journ. Arch.*, vol. i, 1885.

⁴⁰ Preserved in STRABO, p. 611.

⁴¹ PAUSANIAS (vii. 2. 8) says that the Leleges were a part of the Karian people; HERODOTOS (i. 171) that Leleges was the ancient name of the Karians; and STRABO (p. 321) that some authorities, older than he, considered the Leleges and the Karians to be one race, while others maintained that they were only near neighbors and confederates. Thus, HOMER (*Il.* x. 428) refers to both Karians and Leleges among the auxiliaries of the Trojan army. The truth seems to be that the two races were not

of the Leleges is asserted by Strabo (p. 635), Pausanias (vii. 2. 8), Aelian (*Var. Hist.*, vii. 5), Didymos (in Stephanos of Byzantion, s. v. Μίλητος), Eustathios (*Ad Dion. Perieg.*, 823) and Pliny (*Nat. Hist.*, v. 30). Indeed, we learn from certain of these authorities that the town was originally known by the name *Lelegeis*. Thus, we cannot doubt that the primitive Lelegeian character of the southern Troad, and the intimate relations maintained by the towns of this coast with their relatives in Karia—attested by the Dikast stele bearing the names of Mylasa and Alabanda, found at Assos⁴²—led to this choice of the Trojan town as the new home of the exiles: even as Skepsis itself, at a comparatively late period of its history, received a Milesian colony.⁴³

As the text of Strabo in which this passage of Demetrios is preserved has been subjected to an emendation which wholly alters its sense, and is very generally accepted, we must here digress for the purpose of examining this important point. Strabo distinctly states that the Kings removed the colonists in question ἐκ Μιλήτου πόλεως: all the codices agree in this reading, yet Koræes (ed. Strabo, vol. 2, p. 481) has altered these words to ἐκ Μιλητουπόλεως, solely on the ground that the inhabitants of Miletos, to which place he refers as if it were a purely Greek city, could not be said to have barbarized the Gargarans. Forbiger, in his translation of Strabo (Stuttgart, 1858), adopting this alteration, adduces a somewhat more plausible ground for it, namely, that it seems strange that πόλεως should be added to the name of so celebrated a city as Miletos. This radical change, fathered by so great an authority as Koræes,⁴⁴ has been introduced in the best-known and most recent editions of the text of Strabo: those of Kramer (Berlin, 1844–52), Meineke

actually identical, but that they were, in the southern districts of Asia Minor, closely intermingled, and hence frequently confounded by ancient writers, who deemed it unnecessary to be scientifically precise in the ethnographical classification of barbarians. The Karians were evidently the more numerous in the country around Miletos, and had there the upper hand. This is borne out by the interesting statement of PHILIPPOS of Theangela (in Athenaios, vi. 101), that the Karians, both in his day and in earlier times, treated the Leleges as slaves. This writer, the author of a special work on the Karians and Leleges, of which this is a fragment, was, without doubt, correctly informed.

⁴² *Inscriptions of Assos*, edited by J. R. S. STERRETT (*Papers of the American School at Athens*: Boston, 1885), No. ix.

⁴³ STRABO, p. 607.

⁴⁴ With all deference for the great learning of Koræes, it must be admitted that the stricture of DEHÈQUE is merited: *Dans toutes ses éditions, Coray n'a pas assez respecté l'autorité des manuscrits, et s'est trop fié à la puissance de sa critique divinatoire.*

(Leipzig, 1852-53) and Müller (Paris, 1853-58); as well as in the translations of De la Porte du Theil (Paris, 1805-19), Hamilton and Falconer (London, 1848), who follow the French version very closely throughout, and, as before mentioned, Forbiger.

The changes of sense resulting from this emendation are, firstly, that "the Kings" were those of Bithynia, not those of Persia; secondly, that the city from which the colonists were removed was Miletropolis, not Miletos; and, thirdly, that the barbarians were of Thracian, rather than of Lelegeian origin. It can readily be proved that all these assumptions are incorrect, and that the arbitrary change of the words of Strabo is to be rejected. To begin with, the expression "the Kings" is frequently employed by Greek writers of all ages to designate the monarchs of Persia, but never, in so far as I am aware, can be taken, without further explanation, to signify the later and much less important rulers of Bithynia. Furthermore, the Bithynian Kings were never masters of Gargara, the southern Troad having been under the sway of the dynasty of Pergamon during their period. In regard to Miletropolis, an inland town near the confluence of the Makestos and the Rhyndakos, there are no grounds whatever for supposing that a place so small, and certainly not overpopulated, could have colonized this distant coast of the Aegean, or that it would have been found in the interest of the Bithynian rulers to destroy one of their own towns, and decrease the number of their subjects by removing them to any foreign country. Moreover, while no settlement of Bithynians in the Troad is elsewhere recorded, we have the testimony of Strabo himself, already referred to, that the seafaring Milesians, famed for their many colonies,⁴⁸ had sent emigrants to Skepsis, at a comparatively recent period in the history of that town. And while, as has been seen, Gargara is repeatedly described by the latest classical authorities as inhabited by Leleges, we know that a considerable part of the natives of Miletos were of this race, and were consequently viewed by the Greeks as barbarians.

It is even possible to determine, with reasonable certainty, the exact period when the Milesians were removed to Gargara by the Persian kings: Miletos, having been induced through the intrigues of Histiaios

⁴⁸ The existence of some eighty colonies of the Milesians is attested by various evidence. The chief seat of their trade was the Euxine, and on the way thither they founded many stations—among them, Abydos and Lampsakos and Parion, in the Troad.

and Aristagoras to revolt against the Persian power, was besieged by the Persian army, and finally taken by storm (B. C. 494).⁴⁶ The city was sacked, and those of its Greek inhabitants who escaped massacre were taken as prisoners to Susa, thence to be removed, by order of Darius, to a place called Ampe⁴⁷ on the Erythraean sea, near the mouth of the Tigris. The site of Miletos was retained by the Persians, the country around it being given over to its original inhabitants, the Karians. The city is subsequently referred to by Herodotos (VI. 22) as having been entirely depopulated. It is plain, from this account, that, while the Ionian Greeks of Miletos, alone held responsible for the uprising, were transported to a foreign land, the Karians and Leleges were spared. And, as the city was to be blotted from the face of the earth, after the Oriental fashion, these innocent barbarians, deprived of their homes, probably were removed by the victors to the abodes of their relatives upon the northern coast. Gargara, together with the entire Troad, had been under the dominion of the Persian Kings for half a century previous to this event, and there can be no doubt that the Persian governors here established⁴⁸ would have been glad to strengthen their political party among the inhabitants by the introduction of colonists of tried fidelity.

If these inferences are well drawn, this is the earliest reference to our city in actual history, for the presence of Galenos of Gargara before the gates of Troy, where he is said to have been slain by Neoptolemos,⁴⁹ can scarcely be taken into account. As a stronghold of the Leleges, subject to King Altes of the neighboring Pedasos, Gargara may, however, be supposed to have taken a part in that famous contest.

The vicinity of Gargara to Assos and the intimate political relations which subsisted between the two towns suffice to explain the statement of Strabo (p. 611), that Gargara was founded by the Assians. But the Lelegeian character of both places renders it impossible for us to accept this passage in its literal sense, as signifying that Gargara did not exist until a comparatively advanced period in the history of Greek Assos.

⁴⁶ HERODOTOS, VI. 18.

⁴⁷ This ancient penal settlement seems to have maintained its Greek character for centuries, being obviously identical with the town Ampelone on the Erythraean sea, mentioned by Pliny (VI. 28) as a colony of the Milesians. RAWLINSON (*Notes to Herodotos*) thus errs in stating that the city Ampe is known only to Herodotos and Stephanos.

⁴⁸ We learn from HERODOTOS (VII. 106) that Persian governors were established in the province of the Hellespont before the invasion of Greece by Xerxes.

⁴⁹ QUINTUS of Smyrna, X. 90.

Even without taking into consideration the probable removal of the Milesians to Gargara, and the existence of incuse coins of Gargara which cannot be assigned to a date later than the fifth century B. C., we have in the repeated assertion of ancient writers, that the town was a stronghold of the Leleges, and an Aiolian settlement, arguments amply sufficient to controvert the statement of Mannert,⁵⁰ followed by Groskurd,⁵¹ and Forbiger,⁵² that Gargara was not founded until the latest ages of the Persian monarchy. It is indeed surprising that three so eminent authorities should fall into such an error.

Perhaps the most interesting record of the special history of Gargara is the fragmentary inscription giving lists of the towns paying tribute to Athens, during the third quarter of the fifth century B. C., for the purpose of maintaining a defence against the Persians, from whose yoke the Troad had been freed by the battle of Mykale.⁵³ While the annual contribution of the Assians⁵⁴ was one talent, the Gargarans were assessed at 4500 drachmes; which sum is known, from the inscription, to have been paid from 454 to 440 B. C., and must have been continued for many years thereafter, as the cities of the southern Troad were among the last to break from this alliance. There is thus good reason for assuming that the population, or, at all events, the wealth of Gargara, was at this period equal to about three-quarters of that of Assos.⁵⁵

Another inscription, found at Hissarlik by Calvert and published by Schliemann,⁵⁶ shows that Gargara belonged to a confederation of the towns of the Troad which was in force during the first hundred years succeeding the death of Alexander the Great, and must have been actively engaged in repelling the continual inroads of the Gauls.

⁵⁰ *Geographie*, vol. VI. 3.

⁵¹ *Notes to Strabo*, edition before quoted.

⁵² *Geographie*, vol. II.

⁵³ First published by A. R. RANGABÉ, *Antiquités Helléniques: Athènes*, 1842-55, vol. I; most recently in *Corpus Inscr. Attic.*, vol. I.

⁵⁴ Assos appears in these inscriptions as Ἰσσοί.

⁵⁵ If, consequently, the latter town had ten or twelve thousand inhabitants, the former may have had some eight or nine thousand. This estimate agrees with the relative area of the two places, enclosed within their fortification-walls; for, as will presently be shown, it is susceptible of proof that the Gargara of the fifth century B. C. was the old town upon the summit of Qozlou, not the port at its foot. Still, it must be admitted that trustworthy data for estimating the population of the two places are not at hand. The only means of forming a judgment as to the size of Greek towns, whose inhabitants differed so greatly from moderns in ways of civic life and habitation, is a comparison of their area with the known extent and population of Athens.

⁵⁶ *Ilios*: Leipzig, 1881, p. 633.

This confederation had its seat in the new town of Ilion, created by Alexander. This proves that the institution must have been subsequent to Alexander's visit to the Troad, 334 B. C., while internal evidence of the inscription makes it probable that the union was in existence prior to 306 B. C.⁵⁷ If Koumanoudes be correct in assigning the cutting of the stone to the age of Antigonos Doson, we may conclude that the confederation continued in force until Gargara was incorporated into the kingdom of Pergamon. The fact that the towns of the Troad, freed forever from the rule of the Persians, were banded together in a confederation of their own, instead of in the *Koinon* of the Hellenes, which had its *Synedrion* at Corinth, is an important indication of the independent political position of the country under the Diadochi.*

The next mention of Gargara, in point of date, is contained in an epigram of Aratos of Soli :

Διάζω Διότιμον, ὃς ἐν πέτραισι κάθηται,
Γαργαρέων παισὶν βῆτα καὶ ἄλφα λέγων.⁵⁸

These lines contain an indication of much interest in the topographical history of the town, for it is obvious that, at the time when they were written, Gargara was still perched upon the summit of the Qozlough, where the inhabitants might fitly be described as dwelling amongst the rocks. The new settlement, on the coast, cannot possibly be thus referred to. Aratos wrote as late as the middle of the third century B. C., and, inasmuch as Strabo, at some date near the beginning of the Christian era, found the town upon the seashore, we shall not be wrong in assuming that the inhabitants of Gargara removed from their mountain stronghold during the peaceful reign of the Kings of Pergamon, or the earliest ages of their heirs, the Romans. Nothing further is known of this Gargaran Diotimos, the friend of Aratos, but it is a coincidence worthy of mention, that the only other person of that name is likewise referred to as a schoolmaster.⁵⁹

At the beginning of the second century A. D., we note the first indications of that social disorganization and outlawry which is so characteristic of the Eastern Empire. The heights of Ida are then referred to

⁵⁷ On the date of the establishment of this confederation, compare J. G. DROYSEN, *Geschichte des Hellenismus*: new ed., Gotha, 1878.

⁵⁸ *Palatine Anthology*, IX. 437; preserved also by MACROBIUS, *Sat.*, v. 20; and, in a corrupt form, by STEPHANOS of Byzantium, s. v. Γάργαρα.

⁵⁹ LUCIAN, *Hetair. Dial.*, x. 1.

as the resort of the notorious bandit Tilliboros, whose exploits formed the subject of a work by Arrian.⁶⁰ Nevertheless, the town of Gargara continued to flourish. It appears among the chief places of the Byzantine *Eparchia* of Asia, in the sixth century A. D.;⁶¹ and its ecclesiastical establishment was of sufficient importance for it to send a representative, named Nikephoros, to the second council of Nikaia, A. D. 787.⁶² The bishopric of Gargara is further mentioned in six of the Byzantine *Notitiæ*—I, III, VII, IX, X, XIII.⁶³ Of these, VII is the oldest, being referable to a period shortly before the schism, 857 A. D.; I is dated 883 A. D.; III, X, XIII are the most recent, being later than 1084 A. D.⁶⁴ XIII gives the order of dignity as determined by Andronikos Palaiologos, 1282–1328 A. D. It is thus an assured fact, that Gargara continued to exist as a place of much importance until the beginning of the fourteenth century, when the southern Troad fell into the hands of the Turks. The inhabitants of Gargara must have been among those who, under the leadership of Machrames, threw themselves into the citadel of Assos. This last stronghold of the Greeks, who had occupied the land for twenty-three centuries, was finally given up in the year 1306 A. D. From the Asiatic Leleges it was taken: to the Asiatic Turks it has returned.

The general outlines of the history of Gargara are so well known from literary sources that little remains to be gleaned from the indications afforded by the coins of the town. Apollon seems to have been the chief deity, his head, laureate, forming the usual type of the obverse. There are in existence several exceedingly fine specimens of Gargaran die-cutting, with this head, and, upon the reverse, incuse, a grazing bull.⁶⁵ One of these, which has been published in photograph during the present year,⁶⁶ is remarkable for the distinction of style displayed in the head, and for the skilful modelling of the animal forms. Upon the coins of Gargara are also found the types of Kybele, Demeter,

⁶⁰ Referred to by LUCIAN, *Alexander*, 2.

⁶¹ HIEROKLES, *Synekt.*, xx. The name is here wrongly written Γάδαρα.

⁶² Paris edition of Councils (1644), vol. xviii, p. 312.

⁶³ Ed. PARTHEY (Berlin, 1866), i, 100; iii, 20; vii, 90; ix, 11; x, 155; xiii, 18.

⁶⁴ Valuable suggestions in regard to the age of these lists have recently been made by W. M. RAMSAY, *Antiquities of Southern Phrygia*, *Amer. Journ. Arch.*, vol. iv, 1888.

⁶⁵ Several are published by C. R. FOX, *Engravings of unedited or rare Greek Coins*: London, 1852.

⁶⁶ W. WROTH, *Greek Coins acquired by the British Museum in 1887*: London, 1888: reprint from the *Numismatic Chronicle*, ser. 3, vol. viii.

Tyche, Asklepios, and Telesphoros. The appearance of the two deities last named attests that great revival of the worship of the healing god which took place in the southern Troad, as in many other parts of Asia Minor, during the first two centuries after Christ. The imperial coins of Gargara range from the time of Augustus to that of Septimius Severus.⁶⁷

LAMPONIA.

Lamponia, whose name was variously written by ancient authors, *Λαμπωνία*,⁶⁸ *Λαμπώνιον*,⁶⁹ and *Λαμπώνεια*,⁷⁰ was, like Assos and Gargara, a colony of the Aiolians.⁷¹ Its relative position is evident from the way in which it is mentioned by Strabo (p. 610), who, describing the cities on the northern coast of the Gulf of Adramyttion, names them in this order: Assos, Gargara, Lamponia. In conformity with this is the reference to the town made by Herodotos (v. 26) in giving an account of the expedition of Otanes, commander of the Persian forces. In the year 506 B. C., this officer, sailing from Byzantion, by way of Chalkedon, landed upon the coast of Asia Minor at Antandros, and took that town, together with Lamponia. It may be regarded as certain that Lamponia was situated next to Antandros, for, in the account of a short incursion of this kind, an intervening place would scarcely have been passed without mention. Hence we must seek Lamponia between Gargara and Antandros, and there can be no doubt that it is to be identified with the ancient site lately discovered upon the summit of Qojekia-dagh. This eminence, midway between Gargara and Antandros, and six and a half kilometers from the sea, rises at the head of the deep ravine in which flows the Moussouratly-sou (the ancient Hieros?), between the small Turkish villages of Araqlı and Moussouratly. A green schist of dark color here underlies the tertiary, and presents a striking contrast to the beautiful limestone peak, the light gray of which, forming a bright spot in the landscape, fully explains the choice of the name bestowed upon the Greek city here situated, and would, of itself alone, afford a strong presumption in favor of this identification.

The fortifications of Lamponia, like those of Gargara, occupy the

⁶⁷ T. E. MIONNET, *Description de médailles antiques*: Paris, 1806-37, *supplément*, vol. v, 358.

⁶⁸ By HERODOTOS and HELLANIKOS.

⁷⁰ By STRABO.

⁶⁹ By HEKATAIOS.

⁷¹ STRABO, p. 610.

highest point of the mountain. The citadel is thus almost impregnable. Intimidated by the surrender of Antandros, it must have opened its gates voluntarily to Otanes, for it certainly could have withstood a much longer siege than the Persians were able to undertake at this juncture. The ruins show a polygonal masonry of the same general character as that of the walls of Gargara, the most noteworthy difference being in the shape of the individual stones, which were here quarried from a formation breaking more readily into regular parallelograms. Among the few vestiges of ancient occupation, found within the enclosure, none could be ascribed to a date later than the fourth century B. C.

Concerning the history of Lamponia, nothing is learned from the mere mention of its name by Hellanikos and Hekataios,⁷² who are to be cited as completing the list of classic authorities who refer to it. The Lamponians appear in the Athenian inscription before mentioned, as paying tribute for the purpose of maintaining a defence against the Persians. For the first twenty-nine years of which we have an account (454-426 B. C.), their annual contribution was fixed at 1000 drachmes, a sum thereafter raised to 1400 drachmes. We may hence suppose the population of Lamponia at the period in question to have been but about one quarter of that of Gargara, or one half that of Neandreia.⁷³ The number of its inhabitants can scarcely have exceeded two thousand.

Certain coins inscribed ΛΑΜ, and hitherto classed with those of Lampsakos, have recently been identified by Six⁷⁴ as belonging to Lamponia. That the attribution proposed is correct may be proved by a point not adduced in its favor, namely, that the symbol of the reverse, a bull's head, is precisely like that which appears upon the coins of Assos referable to the same age. The signification of this symbol, and its connection with the moon-cow of the Phrygian Atê, who had formerly been worshipped in the Troad, will be discussed in the forthcoming Report upon the investigations at Assos. The obverse of the coins of Lamponia shows the bearded and ivy-wreathed head of Dionysos, of whose cult in this country there are otherwise but few traces. The latest known coinage of the town dates to the middle of the fourth century B. C. Taking this fact together with the absence of Hellenistic, Roman, or

⁷² Quoted by STEPHANOS of Byzantion, s. v. Λαμυρία.

⁷³ The annual contribution of the Neandreians was 2000 drachmes.

⁷⁴ In IMHOOF-BLUMER, *Monnaies Grecques*: Paris, 1883. The British Museum has three coins of Lamponia.

Byzantine remains upon the site, and with the disappearance of the name of Lamponia from all literature after Hekataios, Hellanikos, and Herodotos (excepting only Strabo, whose geography is largely historical), we may conclude that the town was deserted during that general migration of the Trojan population which took place under Alexander and his immediate successors. There can be little doubt that the remote situation of the Qojekia-dagh—so distant from the sea, and yet without an agricultural dependency—accounts for the removal of its inhabitants. The tendency of Greek towns near the coast thus to descend, in times of long continued and assured peace, from the mountain-tops which had provided a safe retreat in ruder ages, is thus exemplified by the topographical history of Lamponia, as well as by that of Gargara.

No attempt to determine the position of Lamponia seems hitherto to have been made. Upon Smith's *Ancient Atlas*, Kiepert's *Atlas Antiquus*, and upon the map published in the first volume of the *Corpus Inscriptionum Atticarum*, the name of the town is printed about in the position of the ancient Tragasai, near the mouth of the Satnioeis, on the Aegean coast—a far-distant quarter of the Troad.

PIONIA.

Pionia is described by Forbiger⁷⁵ as lying on the river Satnioeis, northeast of Gargara, and northwest of Antandros. I am not acquainted with any ancient authority from whom this precise information can have been derived; but, if a conjecture, it is, as practical investigation shows, an exceedingly fortunate one. Strabo (p. 610) states that after Skepsis follow Andeira, Pionia, and Gargara. Andeira is known⁷⁶ to have been situated southwest of Skepsis (Qourshonloutépé), in the neighborhood of the mountains Deli-tépé and Qaraman-tépé. Thus Strabo mentions in their order from northeast to southwest the towns lying on the main road between Skepsis and Gargara, a route which he himself doubtless followed during his journey through the Troad, in the reign of Augustus. Pionia is also mentioned by Pliny (v. 32, ed. Delph. I, p. 611) immediately after Andeira, and in a previous passage (ed. Delph. 609) we are informed that it was, in Roman

⁷⁵ In PAULY, vol. v, s. v. *Pionia*.

⁷⁶ On the position of Andeira, see STRABO, p. 614; PLINY, *Nat. Hist.*, II. 30. A comparison of the ancient mines of Andeira, described by Strabo, with those still to be seen in this vicinity will be made on a future occasion.

times, placed under the jurisdiction of Adramyttion, together with towns much more remote. Pausanias (IX. 18. 3) calls it Pioniai, describing it, very vaguely, as situated in that part of Mysia which lies above, that is to the north of, the Kaikos. The inhabitants asserted their town to have been founded by a certain Pionis, one of the Herakleidai; and Pausanias assures us, having himself witnessed the miracle, that, when they were about to offer sacrifices to this eponymous hero, smoke rose from the grave.

The site of Pionia is a low hill upon the northern bank of the Satnioeis, bearing somewhat west of north from the Qojekia-dagh (Lamponia), from which place it is distant about five kilometers. The town was consequently, as Forbiger has described it, almost exactly north-east of Gargara, and west-northwest from Antandros. The river Touzla (Satnioeis), which above the Assian plain is hemmed in by picturesque pinnacled cliffs of the conglomerate of Qozlou-dagh (Gargara), has formed a long and narrow alluvial plain between this gorge and the rugged mountains farther east in which it has its source. The fields are here exceptionally fertile, still producing, even under the primitive and inadequate cultivation of the Turkish peasants, extraordinarily rich harvests of grain. Pionia was thus the centre of an agricultural district of much importance, and its name was without doubt derived from these fat (*πίον*) and well-watered meadows.⁷⁷ The plain is to-day known as that of Aivadjyq, and supports the population of the Turkish town of that name, the largest place in the southern Troad.

Strabo (p. 610) informs us that Pionia was, like so many of the citadels upon the neighboring coast, a settlement of the Leleges; and it may be gathered from the tradition preserved by Pausanias that it was also, like them, a colony of the Aiolic Thessalians. Favored by the fertility of the district surrounding it, this country-town continued to exist as the chief place of the upper valley of the Satnioeis, not only under the Romans, but until the latest ages of the Byzantine Empire. Pionia is named in the *Synekdemos* of Hierokles (XXI), and is known to have sent an ecclesiastic, named Eulalios, to the council of Chalkedon, A. D. 451.⁷⁸

⁷⁷ PARE, *Eigennamen*, ingeniously translates the name of the eponym, Pionis, by that of the composer Marschner.

⁷⁸ Paris edition of Councils, vol. VIII, p. 665. Curiously enough the next signature is that of an ecclesiastic of the Troad bearing the name Pionios, evidently derived from that of the town. The ecclesiastical importance of Pionia seems to have been out of all proportion to its size, and leads us to suspect that one of the seminaries of the Eastern Church, or some other religious establishment, here had its seat. Possibly the

It also appears in the *Notitiae* I, III, VIII, IX, X, XIII, VII,⁷⁹ the adjective of its name being written in the first six of these with an *omikron*, in the last with an *omega*. The fact that Pionia is included in the very latest of these lists (*Not. XIII*, that of Andronikos Palaiologos) proves that it, like Gargara, existed until the Turkish occupation of the land.

Coins of Pionia, though rare, are to be found in most of the great collections of Europe.⁸⁰ The types upon them refer to the worship of Dionysos, Athena, Asklepios, and, as might be expected from the family connection of the eponym, to that of Herakles. The imperial mintages of Pionia include the reigns of Hadrian and of Septimius Severus. Vaillant⁸¹ has given the inscription upon one of these coins as ΕΠΙ. CΤΡ. ΑΥΡ. ΑCЦИΟΝ ΠΙΟΝΙΤΩΝ, and hence infers that an alliance existed between Pionia and Assos; but Borrell⁸² has shown that this is an erroneous reading for CΤΡ. ΑΥ. ΒΑCCOΥ ΠΙΟΝΙΤΩΝ, which is plainly to be distinguished upon a specimen in better preservation. This correction has not been made in the most recently published work upon the subject.⁸³

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miracles performed by pagan priests at the grave of the eponym Pionis were continued, as in many similar cases, under Christian tutelage.

⁷⁹ Ed. PARTHEY: I, 159; III, 92; VIII, 170; IX, 77; X, 218; XIII, 78; VII, 145.

⁸⁰ MIONNET, *Description*, vol. II, p. 626.

⁸¹ Quoted by J. H. VON ECKHEL, *Doctrina Numorum Veterum*: Vindobonae, 1792-98, vol. II, p. 475.

⁸² *Unedited autonomous and imperial Greek Coins*, in *Numismatic Chronicle*, vol. VI, 1843.

⁸³ B. V. HEAD, *Historia Numorum*: Oxford, 1887.

NOTES.

NOTE ON W. M. RAMSAY'S "ANTIQUITIES OF SOUTHERN PHRYGIA."

A. IX. ADADA (vol. III, p. 368).—The situation of Adada given above depended on a coin with the legend ΑΔΑΔΑΤΩΝ, published by Mionnet, and vouched for by him though doubted by Sestini. The coin seems to bear a magistrate's name, which would place Adada in Asia. But, as the name is certainly partly misread and as the whole legend has a suspicious look, I am forced, after consulting various numismatic authorities, to the conclusion that it is either spurious or quite wrongly read. Moreover, Professor Sterrett's inscription (*Wolfe Expedition*, p. 299) shows that Adada was probably at Kara Baylo: his argument to the contrary (p. 283) being founded on a misconception, as Professor Hirschfeld has also observed (*Gött. Gel. Anz.*, 1888, p. 589). What then was the city situated at Elles or Elyes? If, as is probable, Elyes was in Asia, it must be Okoklia, the problematic Phrygian city hitherto unplaced, and unknown except from coins. Its failure in the Byzantine lists may be due to its being renamed Valentia (this name was above conjecturally assigned to Takina, but Takina might be easily included as a village under Keretapa). It may perhaps be hid under the corrupt Latrileon of the *Anon. Ravenn.*, which indicates some city on a Roman road in this neighborhood.

XVIII. SEIBLIA (IV, p. 281).—The name Χόμα is, perhaps, really Turkish: Homa, the modern name, is also found in a purely Turkish country, between Konia and Seidi Sheher, where we have two villages, Asha and Yokari Homa. The use of Turkish names in late Byzantine writers is not uncommon: *e. g.*, in this same neighborhood, Τζυβερτζή is certainly a Turkish word ending in -ji.

W. M. RAMSAY.

THE PUBLICATIONS OF THE GERMAN ARCHÆOLOGICAL INSTITUTE.

The new arrangements for the publications of the German Archaeological Institute have already justified themselves, and we are glad to state that the doubts expressed in a former number of the *JOURNAL* (vol. III, p. 387) in regard to the advisability of the changes made and the sufficiency of the motives for making them have proved groundless.

The change of the *Monumenti* into a publication not confined to the Roman branch of the Institute, but common to all the branches, is alto-

gether to the advantage of students of classical archæology. The *Monumenti*, as is well known, and as was natural from the fact of the publication at Rome, had gradually become very largely devoted to Italian antiquities. It was seldom of late years that a Greek monument, or one from the Louvre or the British Museum or other foreign source, found its way into it. An equal share in the plates of the *Antike Denkmæler* is now allotted to the Roman and to the Athenian branch of the Institute, and to the Berlin Direction,—thereby assuring a greater variety and importance to its contents. The choice of Berlin as the editing-place of this common publication, determined originally by the fact that it was the seat of the Central Direction, has proved of advantage, owing to its superiority in the practice of the various modern methods of the reproductive arts as compared with Rome. Indeed, the better plates of the *Monumenti* had for many years been executed at Berlin, and thence transmitted, at needless risk and cost, to Rome.

But, besides the improvement in the plates, the new system has brought about a new and improved order in the literary contributions issued by the Institute. The plates of the *Antike Denkmæler* are accompanied by a brief matter-of-fact statement concerning the monument illustrated, leaving the elaborate discussion of it, should this be needed, to the pages of one of the three periodicals of the Institute,—the *Bullettino* of the Roman branch, the *Mittheilungen* of the Athenian, or the *Jahrbuch* of the Berlin. The size and bulk of the Roman periodical have been increased to bring it into conformity with the *Mittheilungen*, so that it affords ample space for such papers as used formerly to appear in the *Annali*. No such change, as was feared, has occurred in the relations of the Italian and German members of the Institute at Rome; for the new system, though it deprives the Roman branch of the Institute of a part of its old prestige, leaves its old position otherwise unimpaired, and is accepted by the Italian members themselves as a logical and necessary development of the work in which they have hitherto borne, and must hereafter bear, an honorable, distinguished and essential part.

If France could but once more take a cordial part in the work of an Institution which once, and for a long period of years, owed much to her, the story of the second half-century of the life of the Institute would be even better than that of its first fifty years which Michaelis has so admirably told.

C. E. N.

THE AMERICAN SCHOOL OF CLASSICAL STUDIES AT ATHENS.

The seventh year of the American School of Classical Studies at Athens opens Oct. 1st. in the new building, which is for the first time the home of the School, although the books of the library have been there for six months or more, and some of the students had their quarters there for a few weeks in the spring. All accounts of the completed building agree in

representing it as fulfilling admirably the plans and wishes of the Managing Committee of the School and of the architect, Professor Ware; it is both elegant and convenient. Some work remains to be done about the grounds, but part of this can be postponed without injury, and part can be done to the best advantage after the grading of the street by the Greek Government.

The friends of the School have hoped that with the occupation of the new building might begin a new era in the School's history with a permanent Director. Nearly two years ago, Dr. Charles Waldstein was invited to take the direction of the School for a period of five years. He accepted this invitation on condition that the fund for the permanent endowment of the School be secured by July of this year. This condition was not fulfilled, and naturally Dr. Waldstein was unwilling to resign his honorable and comfortable position in England. He has consented, however, to assume the general direction of the School for the coming year, so far as is possible without interfering with his engagements in England. He kindly invites one of the members of the School to prepare himself for some special work by study in the Fitzwilliam Museum under his direction this autumn. He will be in Athens during the winter for as long a period as his English engagements will permit, and he expects to go to Athens again in the spring. He hopes, also, to be able to invite the members of the School to work with him in England during June. This is manifestly only a compromise, and cannot be a permanent arrangement. We are obliged to accept the situation: the endowment was not secured, and we must wait for our permanent Director.

The details of the work of the School for the coming year are in the hands of the Annual Director, Professor Frank B. Tarbell, whose broad, accurate, and critical scholarship has been shown during eleven years of service as teacher of Greek in Yale College. He has always interested himself in the archaeological side of classical study, perhaps especially since his visit to Greece in 1880, and he spent the year 1887-88 in Berlin, engaged in advanced work in lines which will make his advice and instruction particularly valuable to the students at Athens.

Of the students of last year, but one remains at Athens,—Mr. Carl D. Buck, of Yale College, who was the fortunate head of the excavations at Ikaria last winter, and who had an instructive article in the last number of this JOURNAL. Four others have presented their credentials to be admitted as students, one of them being a recent graduate of Wellesley College. Very likely, others will present themselves later, but the number in residence will probably be smaller than that during the last two years, when the number was larger than that of any of the other national schools, and larger than this country could expect to maintain at present.

PROFESSOR PUTNAM'S WORK IN THE OHIO VALLEY.

We quote the following from a circular sent to the friends of American Archaeology by Professor F. W. Putnam of the Peabody Museum of American Archaeology and Ethnology, Harvard University. We heartily concur in his estimate of the great importance of the investigations in the Ohio valley, and urge our readers to give them substantial aid and coöperation.—ED.

"For over seven years the explorations in the Ohio valley have been prosecuted by the aid of contributions received from friends from time to time. The glacial gravels have been searched in the Little Miami valley, and the implements lost by preglacial man have been found, as in the Delaware valley, buried in the gravels. Our explorations have brought to light considerable evidence to show that after the rivers cut their way through the glacial gravels and formed their present channels, leaving great alluvial plains upon which the primeval forests had not yet encroached, a race of men with short, broad heads reached the valley from the southwest and established their towns, often surrounded by great earth embankments, upon these alluvial plains. Here they cultivated the land and raised crops of corn and vegetables, became skilled artisans in stone, copper, silver and gold, shell and terracotta, making ornaments and weapons and utensils of various kinds. Here were their places of worship, their fixed places for burning certain of their dead, whose ashes were buried in elaborately made graves, sometimes in cemeteries where the bodies of others of their dead, not burnt, were placed in similar graves; in some instances, they erected, over the remains of their distinguished dead, monuments of earth, often elaborately constructed. Here we have found upon altars of clay, where cremation had probably taken place, offerings of the most precious possessions of the people, ornaments by the thousands thrown upon the fire. Over the altars were strangely constructed mounds of earth, which must have taken an immense amount of labor. Upon the hills near by we have explored their places of refuge, or fortified towns.

"In the same valleys we have found the village sites and burial places of another race; the long, narrow-headed people from the north, who can be traced from the Pacific to the Atlantic, extending down both coasts and sending their branches towards the interior, meeting the short-headed southern stock here and there. In the great Ohio valley we have found places of contact and mixture of the two races, and have made out much of interest telling of conflict and of defeat, of the conquered and the conquerors.

"We feel that we are upon the threshold of greater discoveries. We have found, after years of careful search, a great burial place of the mound-building people of the Ohio valley, the exploration of which we are confident will yield important results, but the graves are deep in the gravel, under the layer

of alluvial deposits, and it is expensive and laborious work to carry on the explorations. We have also discovered extensive sites of former settlements, sites which should be examined foot by foot before the plough and the hog obliterate further surface indications.

"From time to time, in the Annual Reports, brief statements of progress of the explorations have been made to show to contributors to the exploration fund what has been accomplished by their assistance. A full report is in progress which will be published with several hundred illustrations, but it is of the first scientific importance that the report should contain the results of the completed work in the Little Miami valley, and hence it will be delayed until the explorations there are finished, if it is possible to accomplish that desirable end.

"The Museum, in connection with its explorations, has been the means of exciting an interest in the preservation of important ancient monuments in the country; and, thanks to the aid of the ladies and gentlemen of Boston, one of the most important of all, the great Serpent Mound, has been secured and now, in a beautiful park of seventy acres, is preserved for the benefit of future generations. This act of preservation has been far-reaching in its results, and has brought about a change throughout the country in regard to the ancient works, which will lead to many others being preserved. The legislature of Ohio, in acknowledgment of what has been done for the State, has passed a law exempting the land in the park from taxation, with severe penalties in case of vandalism. The law will also apply to any other ancient monuments in the State that may be similarly preserved. Thus the Museum has been the means of bringing about the first law enacted for the protection of the ancient monuments of this country.

"From this brief statement of what the Museum has been able to accomplish by means of the aid which has heretofore been given for the work in Ohio, it is hoped that the importance and the worth of the investigations will be appreciated and will lead to further contributions in aid of continuing the work, now suspended for lack of funds at a time when every week's delay will make it more difficult to resume.

"Five thousand dollars are needed for the expenses of this year and next. Will it not be contributed *in part at once* that the work may go on during the present season?"

Contributions will be thankfully received by the Treasurer of the Museum, FRANCIS C. LOWELL, Esq., 50 State St., Boston, or by the CURATOR at Cambridge.

AN AMERICAN STUDENT FOR THE EGYPT EXPLORATION FUND.

We learn with satisfaction that Dr. F. B. Goddard (Ph. D. Harvard, 1881) is to join the staff of explorers in Egypt under the auspices of the EGYPT EXPLORATION FUND OF ENGLAND AND AMERICA. Dr. Goddard is known to our classical students by a valuable paper on "The Cyrenaica with some account of its history since the Decline of the Empire," printed in the fifth volume of the *American Journal of Philology*. There is a special fund in England for the English student (Mr. Griffith, who has already won an enviable place in Egyptian research), and now the *American Student Fund* is established in connection with the Society. About \$700 are required for this purpose in 1888-9: hereafter a much smaller sum will be required. The ARCHÆOLOGICAL INSTITUTE OF AMERICA subscribes \$100, and donations of from \$5 upwards are asked from the friends of Education for this admirable object. Donors will be entered in the Fund's annual report and receive the illustrated *quarto* of the season. About \$450 have already been received (August 15).

Rev. WILLIAM C. WINSLOW (Vice President of the Fund), 525 Beacon Street, Boston, will receive donations to the *American Student Fund*, and will also furnish the Circulars of the Society.

DOCUMENTS.

As the art of any period is made known to us not only by the works that remain, but also by the records of those that no longer exist, the publication of original documents is a most valuable department of an Archaeological Review.

The following are the first of some additions to the Inventories of the artistic treasures possessed in the Middle Ages by the Basilica of St. Peter in Rome, which inventories were edited, a few years since, by MM. Müntz and Frothingham.¹

GIFTS OF POPE NICHOLAS III (†1280) TO THE BASILICA OF SAN PIETRO IN VATICANO.

Toward the middle of the XIII century, the Basilica of St. Peter had fallen into a deplorably ruinous condition. In 1276, Cardinal Giovanni Orsini, on being made arch-priest of St. Peter's, wrote to the canons expressing a desire to assist in restoring the church, and, when a number of men of importance were sent to him, to Viterbo, by the canons, a petition was drawn up to Pope John XXI for the reparation and enlargement of the Basilica. Shortly after, in 1277, Giovanni Orsini himself was made pope under the name of Nicholas III, and he immediately began to carry out his cherished plan of a thorough work of restoration, which his short pontificate did not allow him to finish, but left for his successor Boniface VIII.

The following inventory of his gifts to the Basilica in the *Libro dei Benefattori* show them to have been of especial magnificence and artistic value.²

¹ *Il Tesoro della Basilica di S. Pietro in Vaticano dal XIII al XV secolo. Con una scelta d'Inventarii inediti*, pubblicati ed annotati ad E. MÜNTZ e A. L. FROTHINGHAM, Jr.: Roma, 1883, *Arch. Rom. di Storia Patria*.

² After these inventories were in print, we received the *Revue de l'Art Chrétien*, 1888, No. 3, containing an article by Mgr. BARRIER DE MONTAULT entitled *Inventaires de Saint-Pierre de Rome*, in which he makes certain additions to the inventories published by M. Müntz and myself. The first and earliest is this one of Nicholas III. The author, however, publishes not the text of this precious inventory, but only a French translation; and even this is very incomplete, for it omits about one-half the objects, notably all the sacred vestments. By reading, in the second paragraph, *duo basilica argenti*, instead of *duo bacilia argenti*, Mgr. Barbier de Montault has led himself into a difficulty of his own making, and he vainly attempts to explain what "two silver basilicas" (instead of "two silver basins") could mean. The notes which he appends to the other objects enumerated are interesting and instructive.

The other two documents which are here published are not mentioned by Mgr. de Montault in his paper.

Anno Dñi millesimo ducentesimo LXXX mense Augusti die XXII obiit sanctiss^{us} mem^{us} Dñs Nicolaus Papa Tertius natione Romanus de Domo Ursinorum, qui in Basilicā nostrā beneficiatos XXX instituit, et in eadem ad honorem Beati Nicolai altare ērigi fecit quod propriis manibus consecravit, iuxta quod sepulturam suam elegit:

Cui altari crucem cum pede argenti, duo candelabra argenti, duo bacilia argenti, duo vascula argenti, unum thuribulum de argento, et duos calices argenti deauratos, unam naviculam argenti cum cocleari quae omnia ponderant XXVIII marchias et VII uncias de argento:

Necnon indumenta serica ad eiusdem altaris culturam, scilicet, duas planetas de samito rubeo, duas planetas de samito violato.

Item duas planetas, unam de samito albo cum frisia Anglicano, et aliam de diaspero albo.

Item dorsalia ac omnia sacerdotalia ornamenta eidem altari obtulit habundanter.

De eius pecunia propria et alia pecunia ipsius cura et sollicitudine nostre Basilice aquisita eadem Basilica duo castra aquisivit, etc.

Item contulit et hic Basilice nostre pannum unum ad aurum, de quo factum fuit unum dorsale pro altari maiori, et unum pulchrum pluviale ad ymages sanctorum contextum de opere Anglicano.

Item contulit unum Tabernaculum argenti cum pisside aurea ad servandum corpus Christi in cena Dñi.

Item pixicem (sic) unam argenti ad hostias conservandas.

Item mitrem (sic) unam multis lapidibus ornatam.

Item annulum Pontificale aureum et sandalia cum caligis de samito.

Item cannulum argenti ad observandum corpus Christi a summo Pontifice.

Habuit etiam Basilica nostra de bonis eiusdem candelabra maiora argenti duo.

Item bacilia duo argenti.

Item unam cassulam argenti ad tenendum hostias, et alia ornamenta ad Altare Sanctae Mariae de Cancellis, necnon pluraque alia idem Sanctissimus Pater et Pontifex nostre Basilice prompta liberalitate donavit.²

² "In 1280 A. D., on the 22nd of August, died Pope Nicholas III of most holy memory, by birth a Roman of the Orsini family, who instituted in our Basilica thirty beneficiaries, and caused to be erected there in honor of St. Nicholas an altar which he consecrated with his own hands, and near which he chose to be buried:

"To which altar he offered profusely: a cross with foot of silver, two silver candelabra, two silver basins, two small silver vases, a silver censer and two silver-gilt chalices, a silver casket with its spoon: the whole weighing 28 marks and 7 ounces of silver: besides these, silk vestments for the service of the same altar, namely, two chasubles of red samite, and two chasubles of violet samite. Item, two chasubles, one of white samite with a border of English workmanship, and another of white diasper. Item, hangings and all other sacerdotal decorations for the same altar.

This list of gifts is remarkable, above all others in the series of donations to the Basilica, for the large number of objects in silver, doubtless of artistic workmanship and probably in many cases enamelled. Some can be identified in the general inventories of later date. The only hint as to the style of the embroidered ecclesiastical robes is, in the case of a *pluviale* and the border of a chasuble, said to be *de opere Anglicano* (cf. Michel, *Recherches sur le commerce, etc., des étoffes de soie, etc.*: Paris, 1850).

GIFTS MADE BY CARDINAL FRANCESCO DE' TEBALDESCHI⁴ IN 1378
TO THE BASILICA OF SAN PIETRO IN VATICANO.

The following document also is taken from the MS. *Libro dei Benefattori* of the ancient Basilica of St. Peter in Rome, still preserved in the sacristy.⁵

In nomine Dñi Amen. Anno nat̃is Dñi M^oCCC^oLXXVIII^o, mense Sept. die VI. Obiit bone memorie Rev^{endissimus} pater et dñs dñs Franciscus de Thebaldescis, tit. S^ce Sabine p̃sabiliter Card. prior et concanonicus ñr qui ñram basilicam m̃ltum dilexit. Nam juxta majus altare cōstrui et erigi fecit cappellam suam in qua requiescit q̃ vocatur altare de ossibus ap̃l^{orum} i qua ĩstituit et ordinavit tres p̃sbr̃os clericos chori ultra ñm. viginti clericorum ĩstitutum p. fe. re. dñm Bonifatium papam VIII p. quos voluit p̃petuis t̃pibus

"With his own money and with other funds procured for our Basilica by his care and thoughtfulness, he purchased for the same Basilica two villages, etc.

"He also presented to our Basilica a piece of gold cloth out of which was made a covering for the high altar, and a beautiful cope woven with figures of saints, of English workmanship. He also presented a silver tabernacle with a gold pyx, in which to keep the body of Christ in the Lord's Supper. Item, a silver pyx to contain the consecrated wafers. Item, a mitre ornamented with many stones. Item, a gold Pontifical ring, and sandals with stockings of samite. Item, a silver tube to be used by the supreme Pontiff in partaking of the body of Christ.

"The Basilica also received of his property two large silver candelabra. Item, two silver basins. Item, a silver casket for keeping consecrated wafers, and other ornaments for the altar of Sancta Maria de Cancellis:

"Besides which this most holy Father and Pope, with ready liberality, gave many other things to our Basilica."

⁴The following notice is given in TORRIGIO (*Le Sacre Grotte Vaticane*: Roma, 1639 p. 234) from a MS. of the archives: *Franciscus de Tebaldescis Rom. Regionis Parionis, Jacobi de Stephanezis Card. S. Georgii ex sorore nepos, ex Priore Canonicorum S. Petri S. R. E. Presb. Card. de S. Petro nuncupatus, tit. S. Sabinæ ab Urbano V. creatus, tenuit Canonicatum annos 34, scilicet ante assumptionem suam ad Cardinalatum annos 24, et post assumptionem usque ad obitum annos 10. Sacellum ossibus Apostolorum Principum dicatum prope aram maximam, pulcherrimo ornatu pecunia ab se testamento legata, aedificavit, in eoque lapidem porphyriticum, super quem ossa SS. Apostolorum Petri et Pauli a Silvestro Papa divisa fuerunt, magnificentius collocavit. Cf. Il Tesoro, p. 71.*

⁵We print here all of the document that has any importance for art, although the beginning has been given by TORRIGIO (*Grotte Vaticane*), and the sentence regarding the three silver statuettes is printed in the Appendix to the above-quoted *Il Tesoro della Basilica*, etc. (pp. 133-34): the statuettes are described pp. 52, 88, 104.

omni die celebrat i dicto altari tres missas pro aia ipsius dñi Card. ac dñi Theobaldi ejus fr̃is concanōici nr̃i. nōt. dñi pape, etc.

. . . executores dñe bo. me. dñi Card. et dñi Theobaldi fr̃is ipsius donaverūt et tradiderūt nob' nr̃e dñe basilice infrascripta bona : videlicet. . .

Item quia pp. scisma novit exortum i Ecclesia Dei nostra basilica erat prout est, in magnis debitis constituta ; ideo manualiter dicti dñi executores solverunt pro distributionibus septem mensium canonicis, beneficiatis, et clericis duo millia florenorum.

Item recolligerunt nostre basilice tres ymages de argento deaurato ponderis . . . duas videlicet ad figuram sancti Apli Petri cum regno in capite, aliam sine regno, aliam ad figuram S̃ci Georgii, que per Capitulum pignorate fuerant pro defensione Romane Ecclesie pro trecentis florenis, quas nobis et nostre basilice sine solutione aliqua tradiderunt. . .

Item tam pro necessitate dicte capelle q̃ pro divino cultu fiendo i nr̃a basilica tradiderunt nob' unum pluviale, unam planetam, cum duabus dyalmaticis et duabus tonicellis albi coloris, cum tribus amictis, tribus camisis ac stolis et manipulis ipsis.

Item unam planetam de panno de dyamasco.

Item unam planetam, duas dyalmaticas, duas tonicellas, duo pluvialia rubei coloris de panno de dyamasco.

Item unam dyalmaticam et unam tonicellam de diaspo rubeo.

Item unam planetam et unum pluviale de diaspo viridi.

Item unam planetam violatam cum camiso et amicto.

Item unam aliam planetam rubeam cum suis fornimentis.

Item unam planetam nigri coloris.

Item duos coscinos (sic) vel riglierios pro altari de diversis coloribus.

Item unum missale.

Item tria frontalia satis pulcra.

Item unum facistorium cum tribus grimialibus de diversis coloribus.

Item unum calicem de argento de aurato.

Item unam crucem cum pede de argento.

Item unam tabulam depictam cum pede satis pulcram de auratam.⁶

⁶ "In the name of the Lord, Amen. In 1378 A. D., on the 6th of September, died the Very Reverend Father and lord Francesco dei Tebaldeschi, of good memory, Cardinal-priest of Santa Sabina, and our prior and fellow-canon who much loved our basilica. For by the side of the high altar he had built and erected his chapel, in which he rests, which is called the Altar of the bones of the Apostles, where he instituted and ordained three priests belonging to the choir, over and above the twenty priests instituted by Pope Boniface VIII of blessed memory, by whom for all time three masses must be celebrated every day at the aforesaid altar for the soul of the same Cardinal and that of his brother Theobald our fellow-canon and papal notary, etc. . . . the executors of the above Cardinal, of blessed memory, and Theobald his brother gave and delivered unto us for our basilica the following property: namely,

The Cardinal to whom the Basilica owed these gifts belonged to the famous noble family of the Tebaldeschi, and was a man of some note. The chapel which he erected was, of course, destroyed with the old basilica. He restored to the Basilica the three well-known silver-gilt statues (two of St. Peter and one of St. George) which had been pawned by the Chapter for 300 florins, another proof of the destitute condition of the Basilica at that time. The history of these statues is sketched in the above-mentioned work on the Inventories.

OPENING OF THE TOMB OF POPE BONIFACE VIII IN THE BASILICA OF SAN PIETRO IN VATICANO IN 1605.

In 1605, Pope Paul V ordered the destruction of that part of the ancient Basilica of St. Peter which, among many ancient chapels, contained that of St. Boniface erected under Boniface VIII (1294-1303) by Arnolfo of Florence, in which was the tomb of Boniface VIII himself. The wooden coffin was opened and the body found, strange to state, quite intact and uncorrupted. Giacomo Grimaldi who was an eyewitness to the ceremony left, in ms., a very minute *procès-verbal*, from which we extract the following description of the beautiful and artistic robes and ornaments in which the body was enveloped: it is taken from his autograph in the Barberini Library at Rome.

Alba quae et camisum dicitur erat ex tela subtili Cameracensi cum fimbriis ante et post tibias, necnon ad manus et pectus; quae fimbriae ante et post

... *Item*, whereas, on account of the recent scism in the Church of God, our Basilica was, as it even now is, in great debt; therefore the said executors paid out two thousand florins for seven months' allowance to the canons, beneficiaries and clerics.

"*Item*, they restored to our basilica three figures of silver-gilt weighing . . . namely, two of St. Peter, one with a tiara on his head, and another without a tiara, and another of St. George, which had been pawned for three hundred florins by the Chapter, for the defense of the Roman Church: these they delivered to us and to our basilica without any payment.

"*Item*, they handed over to us both for the use of the above-mentioned chapel and for the service of divine worship in our basilica, a cope, a chasuble, with two dalmatics and two white tunics, together with three amices and three shirts with their stoles and maniples. *Item*, a chasuble of damask cloth. *Item*, a chasuble, two dalmatics, two tunics, two copes, all of red damask cloth. *Item*, a dalmatic and a tunic of red diasper. *Item*, a chasuble and a cope of green diasper. *Item*, a violet chasuble with a shirt and amice. *Item*, another red chasuble with its accessories. *Item*, a black chasuble. *Item*, two cushions or *riglierii* for the altar of various colors. *Item*, a missal. *Item*, three very beautiful antependia. *Item*, a *facistorium* with three cloths of different colors. *Item*, a chalice of silver-gilt. *Item*, a cross with a silver foot. *Item*, a very beautiful painted gilt tablet (or "pax") with a foot."

tibias singula ipsarum habet in longitudine palmos tres cum dimidio, in latitudine palmum unum, in quibus auro et serico acu pictae (ut vulgo dicitur riccamo) infrascriptae habentur historiae. In fimbria ante tibias sunt in primo ordine historiae Annunciationis, Visitationis, Nativitatis, Apparitionis Angelorum ad pastores, Quando Magi veniunt Jerosolymam, Quando loquuntur cum Herode, Adoratio Magorum, Angelus admonet illos ut revertantur per aliam viam.

In secundo ordine eiusdem fimbriae habentur, Consilium Herodis super occisione Innocentium, Occisio subsecuta, Apparitio ut Joseph fugiat in Aegyptum, Fuga subsecuta, Obitus Herodis, Circumcisio Domini, Disputatio inter doctores, Cum invenitur a matre "fili quid fecisti nobis sic?"

In fimbria vero retro tibias, Consilium sacerdotum ut caperent Jesum, Captura Christi et amputatio auriculae, Flagellatio Christi, Bailatio Crucis, Crucifixio, Obitus in Cruce et Militis percussio, Sepultura, ac Resurrectio. In secundo ordine, Descensus ad Inferos, Noli me tangere, Valde mane una Sabbatorum, Tres aliae historiae Resurrectionis, Quando dicit Thomae "infer digitum tuum huc," et Ascensio in Coelum; quas tres historias subter corpus positas excipere non valui.

Alba longa erat usque ad pedes, et in pectore aderat fimbria cum imagine Annunciationis.

Stola stricta et longa erat palm. VI et quart. 3 usque ad floccas ex broccato intertexto argento et serico nigro opere Turcico.

Cingulum pontificale ex serico rubro et viridi.

Manipulum strictum auro argentoque intertextum opere ad undas cum serico nigro et violaceo duplum erat, pendens a Tunica longum palmis tribus.

Sandalia nigri coloris, acuta et cuspidata more Gothico sine cruce, ex serico nigro ad flores parvos auro intertextos . . .

Tunica pontificalis ex saia de serico nigro cum manicis, . . . fimbriae ante et post . . . ex broccato in campo violaceo cum leonibus auro et serico intertextis.

Dalmatica ex saia de serico nigro . . . in extremitate ante et retro erant fimbriae . . . ex broccato aureo in campo nigro opere Turcico vel Persico et quidem pulcherrimo propter splendidissimum aurum, elaboratae certis rosis binisque canibus rectis, cum manicis latis, in quarum summitate prope manus erant aliae fimbriae eiusdem broccati: in circuitu foderata serico croceo. Caligae pontificales . . . Casula sive planeta lata . . . , etc.⁷

⁷ "The alb (called also *camisia*) was of fine Camerino linen with a border before and behind the tibia, as well as at the hands and on the breast: each of these borders before and behind the tibia is $3\frac{1}{2}$ palms long and 1 palm wide, and on them the following compositions are embroidered in gold and silk (called in Italian *riccamo*). On the border in front of the tibia are, in the first row; the Annunciation, Visitation, Nativity, Angels appearing to the Shepherds, the Magi entering Jerusalem, speaking

Grimaldi made a careful study of the compositions adorning the *alba*, of which he also gives drawings in four groups of 9, 7, 9 and 7 compositions, respectively, three of the latter group not being reproduced, however, because he was not able to make them out, as he remarks in his text. They form a very complete series of New Testament histories. The style of the embroideries can be better judged by that of several beautiful robes dating from the pontificate of Boniface VIII which have still been preserved, especially those in the Cathedral at Anagni, where he resided so long. The expression *opere Turcico vel Persico*, used of the dalmatic and of the stole, is interesting, for it shows them to belong to those imitations of Oriental tapestries which were quite common in the West at an earlier date, before the rise of the national French style, of which the alb here mentioned is probably an example that must have been of remarkable beauty.

A. L. FROTHINGHAM, Jr.

with Herod, adoring the Child, being warned by an angel to return another way: in the second row of the same border; the Council of Herod concerning the murder of the Innocents, the Massacre, the Appearance to Joseph, the Flight into Egypt, the Death of Herod, the Circumcision of the Lord, the Dispute among the Doctors, the finding by his mother who says, 'Son, why hast thou thus dealt with us?' In the border behind the tibia are; the Council of the priests for the taking of Jesus, the taking of Christ and the cutting off the ear, the Flagellation, the Carrying of the Cross, the Death on the Cross and the piercing with the lance, the Entombment, and the Resurrection: in the second row; the descent into Hades, the *Noli me tangere*, the Visit to the Sepulchre, three other incidents of the Resurrection, when He says to Thomas 'thrust in thy finger,' and the Ascension; the above-mentioned three compositions [of the Resurrection] I could not see because they were under the body. The alb extended down to the feet, and the border on the breast bore the subject of the Annunciation.

"The stole was narrow and 6½ palms long, 3 of which were down to the frock of brocade woven with silver and black silk of Turkish workmanship.

"A pontifical girdle of red and green silk.

"The narrow maniple, woven with gold and silver of the style called *ad undas* (with wavy iridescence) worked with black and violet silk, was double and hung from the tunic a length of three palms.

"Black sandals, pointed and cusped in the Gothic style, without cross, of black silk with small flowers worked in gold.

"A pontifical tunic of black silk cloth with sleeves . . . having borders at the front and back edges, . . . of gold brocade on a purple ground, with lions worked in gold and silk.

"A dalmatic of black silk cloth, . . . having borders at the front and back edges, . . . of gold brocade on a black ground of Turkish or Persian workmanship and of remarkable beauty on account of the very brilliant gold; they were adorned with rosettes and with dogs rampant, two by two, with wide sleeves on whose end, near the hands, were other borders of the same brocade: it was lined all around with saffron-colored silk. Pontifical stockings. . . . A wide chasuble or *planeta* . . ." etc.

ARCHÆOLOGICAL NEWS.

SUMMARY OF RECENT DISCOVERIES AND INVESTIGATIONS.

	Page.		Page.		Page.
ALGERIA,	339	GREECE,	349	RUSSIA,	380
ARABIA,	343	ITALY,	362	SICILY,	373
ARMENIA,	346	KRETE,	362	SPAIN,	374
ASIA MINOR,	346	KYPROS,	348	SWITZERLAND,	378
AUSTRIA-HUNGARY,	380	MALTA,	341	SYRIA,	346
BELGIUM,	378	MESOPOTAMIA,	342	TUNISIA,	340
EGYPT,	333	PALESTINE,	344	TURKESTAN,	342
ENGLAND,	381	PERU,	384	TURKEY,	380
FRANCE,	374	PHOENICIA,	346	UNITED STATES,	382
GERMANY,	379				

AFRICA.

EGYPT.

TELL-EL-AMARNA.—*Cuneiform tablets*.—On the authority of Professor Sayce it was announced (p. 191) that these newly-discovered tablets in the cuneiform writing belonged to the late Babylonian period, and were "copies of despatches sent to the Babylonian King by his officers in Upper Egypt." This is found to be a mistake, as is shown by the work *Der Thontafelfund von Tell-Amarna*, von AD. ERMAN. *Bemerkungen v. E. SCHRADER* (*Sitzungsber. Berl. Akad.*, May 3, 1888). Their importance is very great. As Dr. Brown remarks (*Presbyterian Review*, July, 1888): "The clay tablets discovered last winter at Tel-el-Amarna, in Middle Egypt, afford one of those surprises which delight the hearts of archaeologists and scatter rays of light in all directions." This place was the site of the city Khu-aten which was built by "the heretic" Amenophis IV of the XVIII dynasty, after he abandoned the worship of his ancestral gods: he made it his capital and it was apparently uninhabited after his time. Most of the tablets, some 160 in all, have come into the possession of the Museum in Vienna, only a few remaining in Bârlâq: they have been studied by Erman, Schrader, Winckler and Lehmann. [According to the London *Athenæum* of June 9, 160 have gone to Vienna, 60 to the British Museum and 40 to Bârlâq.] These tablets form part of the Royal archives and consist mainly of letters and dispatches sent to Amenophis III and IV by the kings and governors of Palestine, Syria, Mesopotamia, and Babylonia, who were more or less subject to Egypt at this time, i. e., the xv century B. C. That part of the collection which comprised the reports to

Amenophis III was originally preserved at Thebes, but was removed thence to Tell-el-Amarna, on the transfer of the capital, as we learn from a note in hieratic writing written by the archivist. Most of the letters to Amenophis III were sent by King *Dushratta* of *Mitanni* connected by Tiglath-pileser I (xii cent.) with *Araziki*, which city has been identified by Schrader with Eraziga on the W. bank of the Euphrates, south of Carchemish: Mitanni must have been east of that river. One of these letters from Mitanni is termed, in a note of the Egyptian scribe, "letter from Naharina," to be at once connected with the familiar Aram Naharayim. King Dushratta calls himself the father-in-law of Amenophis III, and his letters are chiefly concerned with the marriage of his daughter to the Egyptian King. May she not be the same as the famous Tii. Among the letters addressed to Amenophis IV, are five, of perhaps still greater interest, from Burnaburiash, one of the Kassite Kings of Babylon, the contemporary of Buzurashur of Assyria, who lived probably in the earlier half of the xv cent. B. C. This is very important for Egyptian chronology.

"A considerable number of these letters are from persons calling themselves 'Servants' of the Egyptian Kings, and apparently living in Northern Syria and Phœnicia," as the terms *mat Martu* and *mat Chatti* are mentioned. The names of well-known towns are given, *e. g.*, Byblos, Ajalon, Ashkelon, Accho, Megiddo, Dunip; some of these places thus receiving evidence of greater age than as yet had been derived from cuneiform documents. These letters are "striking testimony to the firm hold of Egypt upon the region lying between her own natural boundary and the Euphrates. In the letter in which Dunip is mentioned, the writer begs the Egyptian King for prompt aid against the Hittite King who is marching against him." Assyria is never mentioned.

"One of the most surprising facts brought to light by these new tablets is the extent to which the cuneiform character and the Babylonian-Assyrian language were employed over Western Asia. It is not so strange that Burnaburiash and Dushratta should make use of that character and tongue, . . . but that reports from foreign (Syrian) towns should be sent to Egypt in the wedge-signs, and in the Shemitic-Assyrian language, argues an acquaintance with these in the fifteenth century which is amazing." It argues an acquaintance with this language on the part of the learned Egyptians and opens up new vistas of a universal language in Western Asia before the rise of Phœnician.—Dr. FRANCIS BROWN in the *Presbyterian Review*, July, 1888, pp. 476–81. Cf. Prof. A. H. SAYCE in *Contemporary Review*, August, 1888.

Translations of the cuneiform tablets from Tel el-Amarna, now in Germany, which have been copied by Dr. Winckler, will be published in the volumes of the *Keilinschriftliche Bibliothek* about to appear under the edi-

torship of Prof. Schrader. We understand that Dr. Winckler is at present in Egypt, examining the tablets from Tel el-Amarna in the Bûlâq Museum.—*Academy*, Sept. 8.

TELL BASTA=BOUBASTIS.—One of the last discoveries made at Boubastis is a granite slab, whereon King Amenophis II is twice represented making offerings to his father Amon, who is said to reside at Perunefer. Between the two pictures Seti I has inserted a short inscription, saying that he renewed the statues of his father (Amon). Thus, it is only after the conquests of Thothmes III that his son, Amenophis II, reoccupied Boubastis, which had been conquered from the Hyksos, or abandoned by them. The last three Amenophis have left their names at Boubastis. At present it is only Benha and Boubastis where monuments of the XVIII dynasty have been found in the Delta, and none of them older than Amenophis II.

A few days before we left, in rolling the blocks of the festive hall of Osorkon, we found on an architrave a very large coronation cartouche of Sebekhotep I of the XIII dynasty. It is the first time it has been seen on a building.—E. NAVILLE in *Academy*, June 30.

The Statue of King Raian or Khian and the lion of Baghdad.—Mr. F. L. GRIFFITH writes to the *Academy* (of June 2), bringing forward evidence of the early date of this statue, the discovery of which is mentioned on p. 194. He has found that the cartouche on the breast of the black granite lion (or sphinx as some think) from Baghdad, in the British Museum, is identical with the cartouche on the statue of Raian. In this view he is supported by H. G. Tomkins (*Academy*, June 16, 23), and by E. Naville (*Academy*, June 30). The probabilities seem to be that both monuments belong to the Hyksos.

Mr. FLINDERS-PETRIE throws new light on the subject by his letter in the *Academy* of Aug. 18, in which he proves the King's name to be Khian, not Raian: "The recent find at Boubastis of a statue of King Raian, and the attribution of a lion in the British Museum to the same king, are by no means the first intimation of him that we possess. Among that long list of kings recorded to us only by their scarabs and cylinders, Raian has been known to exist for years past to those who chose to make themselves acquainted with such remains. The one main new fact shown by the statue is that Ra-sesuser-n and Raian or Khian are the throne and personal names of one king. But on a scarab in Mr. Loftie's collection is one reading Ra-sesuser. The same name occurs on a barbarous-looking cowroid in my collection, and apparently the same on other scarabs in the British Museum and in the Louvre. The omission of the *n* on these is amply accounted for by the contracted style of such inscriptions. The personal name is known on two curious cylinders—one in the Pantechnikon at Athens, and one in Prof. Lanzzone's collection. They are both of

the barbarous style of the Hyksos period. They both record a 'Hak (or Prince) of the hills, Kh-i-a-n.' From these, then, we learn that he was not a regular Egyptian king, but a chieftain of the Sinaitic desert who conquered some part of the Delta, and left Egyptian monuments, thus agreeing to the Hyksos theory. Also it is unmistakable that the first sign in his name in the Lanzzone cylinder is *Kh*, and not *R*. On the statue it is ambiguous, for the sign of difference is there omitted, as it often is. The connection with the Rayan of Arab tradition is therefore almost impossible; and the difficulty of a personal name compounded with *Ra* disappears."—*Cf.* letters of Mr. GRIFFITH and Mr. TOMKINS in *Academy*, Aug. 25, Sept. 1.

CAIRO.—*Architectural photographs*.—Count RIAMO D'HULST, who during the past two winters has assisted M. Naville in his explorations at Tel Bast for the Egypt Exploration Fund, employed the intervening months last year in making a series of architectural photographs at Cairo. They were selected principally to illustrate the so-called Arab architecture of the city, and consist of street views and interiors of courtyards, external and internal views of mosques, paying especial attention to the early ornamentation, of which, unfortunately, there is so little now remaining. The series includes probably all the *kiblehs* and *minbars* in the ancient mosques, together with the minarets and doorways. It also contains most of the objects in the Arab museum. Such a collection cannot fail to be of great value to architects and archæologists, and, indeed, all interested in the art of Cairo.—*Athenæum*, June 2.

THE FAYÛM.—EXCAVATIONS AT HAWARA.—Mr. W. F. PETRIE, who is conducting excavations in the Fayûm, writes to the *Academy* (of June 9):

The Labyrinth.—"The site of the Labyrinth is now fixed beyond reasonable doubt" at the south of the pyramid at Hawara. On excavating "the mud-brick buildings planned by Lepsius as being part of the Labyrinth," they were found to rest upon a mass of fine white limestone chips, and are posterior to the destruction of some great building on that site. Further, the stone chambers, figured by Lepsius as a part of the Labyrinth, are built in a pit dug amid the same fine white chips. They cannot, therefore, be of early work; and they closely resemble the tombs of Roman age found near at hand.

"The result then is that, while Lepsius was wrong as to the buildings he attributed to the Labyrinth, it can hardly be questioned that he was right as to the site. All over an immense area of dozens of acres, on the south of the Hawara pyramid, I found the evidences of a grand building. In every pit I dug there was the flat bed for a pavement, either of clean flat sand, or usually of rammed stone chips, forming a sort of concrete. Over this bed in a few cases the pavement itself remained; while in all parts was a deep mass of chips of the finest limestone lying upon it."

The Pyramid.—"The pyramid at Hawara was another object of my work there. No entrance has been found hitherto; and further work on the north side was fruitless, as well as a trial on the east. The south side was deeply encumbered, and so I determined to tunnel to the middle from the north. Thus I found the roof of the great chamber, which is sunk in a pit in the rock; but I am still on the outside of it, and the work of cutting through it must wait for a few months. It is almost certain that it is the tomb of Amenemhat III, as his name is so constantly found in the temple adjacent (*cf.* A. H. SAYCE in *Contemp. Review*, August, 1888).

"The remains of a group of chapels of the sacred crocodiles have also been cleared and planned; but all the stonework and inscriptions are destroyed.

The Nekropolis.—"While the above work was going on I turned my attention to the cemetery at Hawara, with most striking results. Altogether I unearthed sixty portraits, painted on panel with colored wax, probably of the period from the Antonines to Gallienus. Though many of these are in bad condition, there are several brilliant ones, as fresh as when painted. Most of the fine ones are included in the dozen selected for the Bulak Museum; but among those which I have brought to England are many which will give a new light on the portraiture of Roman times. A large quantity of embroideries and patterned clothing has been found on the mummies. A sarcophagus with long inscriptions of titles and adorations throws much light on the state of the Fayûm anciently. Of papyri there are pieces of hundreds of Greek documents, mostly accounts, lists, *etc.* The only literary papyrus is one of the second book of the *Iliad*. It is of the finest Greek writing, before the rounded uncials or cursive hand; and, though the ends of the roll are rotted, the greater part is in fresh condition. This will be edited by Professor Sayce. There are also many matters of minor interest, such as a glass vase with wheel-cut patterns, a number of funerary inscriptions in Greek, a double series of eight canopic jars of fine work, a large collection of flower wreaths, *etc.*"

Egyptian Portraits of the Roman period.—The portraits recently discovered by Mr. Flinders Petrie at Hawara, the cemetery in the Fayûm, are a welcome contribution to our scanty knowledge on the subject of encaustic and portrait painting as practised under the Roman Empire. Over sixty were found, and of these more than half are to be seen at the Egyptian Hall (Piccadilly), together with the other interesting items of the "find." The portraits are approximately dated as belonging to the second and third century A. D., and were employed to take the place of the modelled gilt masks which covered the features of the Graeco-Egyptian mummy. The time of transition is marked by the fact that in the mummies of different members of the same family some have the gilt cartonnage mask and some the painted portrait. Most of the portraits are on thin cedar panels, but a

few (and these appear to have been intermediate in date between the masks and the panel paintings) are on cloth. The lifelike character of the portraits and their variety of type and expression (no two being at all alike) attest the fact that these are portraits in the true sense of the word. The only unusual characteristic which runs through all (or nearly all) is the largeness of the eye; but that this is not due to the fancy of the painter is sufficiently proved by the skulls discovered, which in nearly all cases have very large eye-sockets, extending much farther down the cheek than in ordinary modern types. The persons represented were evidently of a mixed race, with the exception of one or two palpably and purely Roman. Sometimes the type partakes strongly of the Egyptian, sometimes of the Greek, sometimes of the Roman; but the general impression is of a fine and handsome mixed race. In execution the portraits are unequal, but they bear testimony to a high average skill among the artists employed. In many cases this execution is masterly. One, of an unmistakable Roman, with strong rough features, is painted throughout with visible bold strokes of the brush, the colors being laid on in thick impasto. In most the general laying-in is smooth, with raised high lights and strengthening touches added; in some the work is smooth all through, the modelling and shadowing of the features being executed with much delicacy. Effects of reflected light and color and well-painted jewellery are not unfrequent.—*Academy*, July 7.

Of 66 portraits, mostly busts, 3 were of old men, 24 in middle life, 4 youths, 3 boys, 29 maidens or young women, and 3 matrons. Among the rest must be noticed six of a decided Shemitic type: this will not awaken surprise when we consider the position of the Hellenistic Jews in Alexandria. No. 64 is interesting as representing a man of partly Ethiopian descent with woolly hair. One portrait shows a man with a marked physical deformity of the neck, reminding of Alexander the Great. The extreme life-likeness and realism of the portraits applies to color as well as to form and expression. The youthful female heads are of especial beauty.—*Amer. Architect*, July 14.

Some of this unique series of portraits have been acquired by the National Gallery. Five have been presented by Mr. H. Martyn Kennard, two by Mr. Jesse Haworth, and four have been purchased. Two mummies, with portraits, have been presented to the Egyptian Department, and one to the Greek department, of the British Museum, by Mr. Martyn Kennard; and one to Owens College, one to Peel Park, Manchester, by Mr. Haworth.—A correspondent of the *Times* calls attention to the fact that these portraits have already attracted the enterprise of forgers.—*Academy*, Sept. 1, 8.

THE FAYÛM PAPYRI.—An interesting paper on the papyri found scattered in the ruins of Arsinoë in the Fayûm and on other sites, and now

distributed among the museums of Berlin, Vienna, Paris, and London, recently appeared in the *N. Y. Times*, written by Mr. S. S. Mitchell. "In some cases, fragments of the same whole would be widely scattered, a part finding its way to Paris, another to Vienna, a third to Berlin. A whole series of fragments in the Bodleian Library at Oxford were found to fit exactly into the papyri of London. . . . Of the more recent acquisitions of the Berlin Museum, which had already a collection amounting to 3,600 numbers, it may be said that the greatest care has been taken to obtain accurate information as to the exact locality from whence they come. Not all the new papyri come from Fayûm, but the greater part from the neighboring city Herakleopolis Magna and Hermopolis. In the case of the Fayûm treasure proper, pains were taken to ascertain on which of the numerous mounds of the Arsinoë ruins they were found. Herein lies a great advance on former classification . . . especially since Arsinoë is no longer a unit, but we see that the traces of the old city are marked by widely-scattered mounds. . . . This great accuracy . . . has facilitated the connected treatment of the whole for historical purposes, and that especially since, according to the investigations of Professor A. Erman of Berlin, the development of the city in the course of centuries shows a gradual transfer of its site from north to south. . . . The fragments at Berlin include rolls in Greek, Arabic, Koptic, Phlewi, Greek seal-writing, Demotic, Hebrew, Coptic writing, Greek tachygraphy, Latin parchments, Syriac papyri, and hieratic writing. . . . Of most general interest are the Greek fragments. Of these a small part are literary remains partly on papyrus and partly on parchment: . . . besides familiar portions of the *Odyssey* and *Iliad*, of Euripides, Hippolitus, Theocritus' *Idyls*, of Aristotle's *Analytics*, of Gregory and Basil, and of the *Psalms* and *Gospels*, there were found a new fragment of Sappho, a fragment of the lost *Melanippe* by Euripides, an epos which celebrates the combats of the Blemyans, with passages of singular beauty, and, above all, important fragments of the *Politics* of Aristotle."

SIÛT and RIFA.—*Tombs*.—Mr. F. LL. GRIFFITH is preparing a memoir on the tomb-inscriptions of Siout and Rifa (nine miles south of Siout). In case any Egyptologist intends during the coming season to work at these tombs, Mr. Griffith can supply proofs of his plates (twenty) for 7s. They will be ready in November. Application should be made to him at the British Museum. Students should bear in mind that no serious work can be done at these tombs without a ladder, which should be at least twenty-five feet high, light, and in three joints.—*Academy*, Aug. 25.

ALGERIA.

CHERCHELL and THINGARD.—*Baths and other discoveries*.—At the sitting of June 15 of the *Acad. des Inscriptions*, M. de Vogüé communicated a

report of M. Waille on the excavations of ChercHELL, which resulted in the discovery of baths built probably under Caracalla: a reduced copy, but still important and luxurious, of the analogous monuments at Rome. A considerable number of antiquities were found there. The most numerous inscriptions belong to the reign of Caracalla. In another place a Christian sarcophagus was found with bas-reliefs representing the Adoration of the Magi and the Three Youths in the fiery furnace. He also called attention to the important discoveries made for some time at Thingard by M. Duthoit, the results of which have surpassed anything that has yet been done in the French colonies: "It is the resurrection of a whole city, which recalls the marvels of Pompeii. An entire quarter has been unearthed, with its streets, its pavement with its ruts, its forum, triumphal arches, and shops."—*Cour. de l'Art*, 1888, No. 26; *Paris Temps*, June 18.

Neo-Punic inscription.—At the sitting of June 22, M. PHILIPPE BERGER presented a tentative interpretation of a neo-Punic inscription which was found at ChercHELL and given to the Louvre by M. Schmitter about ten years ago. It is composed of eleven lines engraved on the base of a statue of king Mikipsa. M. Berger has succeeded, up to the present time, in deciphering only the beginning and the end, which he proposes to translate thus:

"Sanctuary [of Khnum] life of the living. Mikipsa, king of the [Ma]ssylians, glorious ruler of numerous countries, the king, the beneficent.

"Has erected for him this statue for . . . his tomb, Iaazam, son of Iasgutan, son of Bogut, son of Masinissa, placed over the sacred things."

At the close: "*Fecit Gaius*, son of N. . . ."—*Revue Critique*, 1888, No. 27.

TUNISIA.

CARTHAGE.—*Christian Sarcophagi.*—Several fragments of Christian sarcophagi have been found, adorned with bas-reliefs, which are of especial interest because in Africa they are extremely rare. Two of these fragments bear the Good Shepherd; others have the Orante, the Multiplication of loaves, and the Healing of the Leper.—*Revue de l'Art Chrétien*, 1888, p. 404.

TUNIS.—*The new Museum.*—The new Alaoui Museum at Tunis was inaugurated May 4: it occupies, at the Bardo, the site which Mohammed-Bey had reserved for his harem. The vast location was appropriated for it in 1885 by a decree of the French minister, and since then M. de la Blanchère has directed its formation. The epigraphic collection, consisting of Punic, Libyan, and especially Latin inscriptions, together with a few fragmentary sculptures, occupy the *patio*. The neighboring hall is mainly devoted to mosaics, the floor being occupied by the magnificent mosaic of more than 140 square metres found at Soussa in 1886, representing Neptune surrounded by marine divinities. There are also some

statues and cases full of sepulchral objects, Phœnician and Roman. Other sections are about to be organized, viz., section of industries of the country, section of ethnography, and finally a Museum of Fine Arts by the side of the Archæological Museum.—*Cour. de l'Art*, 1888, No. 21.

MALTA.

We have received the following letter from Hon. JOHN WORTHINGTON, American Consul at Malta, whose interest in archæology is very praiseworthy. If his example were followed by our consuls at the points where archæological discoveries are made, especially such places as possess no regular means of publication, the cause of the science would be greatly benefitted.

"*Malta, July 31, 1888:* Last March, I heard that the remains of an ancient building had been discovered on this island, in the neighborhood of Micabiba, in the lands called *Nadur*; and bearing in mind the interest taken in Ancient Malta by the *American Journal of Archæology*, I at once had an interview with Dr. A. A. Caruana, the eminent Maltese scholar and archæologist, and requested him to furnish a paper on the Micabiba discovery for the use of the JOURNAL. The Doctor consented and has handed me the paper¹ together with two sketch-plans of the remains of the building unearthed, and of the curious crushing olive-oil (or wine) mill found within. The memoir and sketches I herewith forward.

"You will be interested to know that Dr. Caruana is about to make a survey of the hill of Coradino, on the southeastern shore of the Grand Harbor, where it is hoped that more megalithic remains will be discovered. This hill has already yielded to the archæologist a rich harvest.

"The Doctor, in one of his recent excursions to the adjoining island of Gozo, acquired for the Museum of Malta (which now forms part of the Public Library) a private collection of ancient pottery and glass objects, in a good state of preservation. Remarkable among the latter is an iridescent square urn with bottle-shaped neck and flat bottom, still containing ashes and fragments of human bones. These articles belong to the latest epoch of the Roman Republic and are interesting for their unusual shapes, even in Roman varieties: they were found many years ago in the outskirts of the ancient city of Rabato, Gozo, and in the lands called *Tal Varingia*, and formed part of a private collection. Through Dr. Caruana's efforts, the Public Museum is gradually increasing the number and value of its contents, all of Maltese origin or discovery. If all the many private collections in the islands could be united in one building, Malta would possess a museum valuable for the study of the ancient history of these islands. Finds are con-

¹ This will be published in the next number of the JOURNAL.

tinually made at Notabile—better known as *Citta Vecchia*—the most ancient fortified town in Malta. Rabato is that part of Notabile that lies outside the walls, and is reported to be, just now, the scene of an interesting discovery, thus chronicled in a Malta newspaper: "It appears that the entrance to spacious Catacombs has been discovered under a house in Strada Collegio, Rabato, in the property of Canon Cachia. The Catacombs present a resemblance to those of St. Agata, in the same locality, save that the graves are in better preservation, and some of them are exceptionally well executed, containing terracotta covers and ornaments. An immense quantity of bones has also been discovered, together with several terracotta lamps and a Venetian cup, 12 inches high, the style and manufacture of which are entirely new among our antiquities. The explorations continue."

ASIA.

TURKESTAN.

TASKKEND.—*Tombs.*—A letter from Professor E. Muller dated Taskkend, Nov. 29, 1887, tells of the opening of a series of tombs in mounds situated on a hill 3 or 4 kilom. from Taskkend. The tombs are simple chambers dug in the *loess*, with an elliptical vault, about two met. long and 80 cent. wide and high. After the body and terracotta vases had been placed within the tomb, it was filled with earth. The handles of some of the vases were ornamented with rude figures of animals.—*Revue d'Ethnographie*, Sept.-Dec., p. 516.

MESOPOTAMIA.

ABU-HABBA (Babylonia).—*Archaic contract-tablets.*—M. H. POGNON, the well-known Assyriologist, communicates to the *Journal Asiatique* (April-June, pp. 543-47) the discovery, near Abu-Habba, of a great number of inscribed bricks—mostly contract-tablets—belonging to the earliest dynasty of Babylon. For several months, almost all the dealers in antiquities of Baghdad had been selling them by wholesale. A few bore the names of the first two kings of the dynasty, Hammurâbi and Samsu-ilûna: those bearing the names of Ammi-ditana and Samsu-ditana were more numerous; but the greater part had that of Ammi-zadûga. A great many bore no royal names, but certainly belonged to the same early period. The name Ammi-zaduga (translated on one list "just family") is proved by the orthography of these inscriptions to be certainly Shemitic, *zaduga* = Heb. *zadiq*, Syr. *zadiqa*, Arab. *šadiq*, Eth. *sedeq*. M. Pognon also claims a Shemitic origin for the names *Ammi-ditana* (*dîtânu*, Assy. for "prince") and

Samsu-ditana (ammu, "family"). Although he considers the entire dynasty to be Shemitic, M. Pognon believes it Arabian or Aramaean rather than Assyrian; that it is, in fact, a foreign dynasty.

TELLOH=SIRPURLA.—M. AMIAUD communicated to the *Acad. des Inscriptions* (June 22) his studies on the inscriptions of Telloh which have enabled him to arrive at precise conclusions on some points which have remained doubtful. Thus, it had been noticed that, in several texts, mention was made of the sanctuaries of certain divinities, indicated as being situated in localities other than Sirpurla, such as Ghirsu, Nina-ki, Uru-azagga. It was surmised that these names represented as many distinct cities: it was even proposed to identify Nina-ki with Nineveh. M. Amiaud has reached the conclusion that all these names, on the contrary, only represent so many suburbs or quarters of the city of Sirpurla.

M. Amiaud has succeeded in deciphering a much-worn inscription in which he reads the name of Uru-Kaghina, king of Sirpurla, which hitherto has been known from only two monuments.—*Revue Critique*, 1888, No. 27.

ARABIA.

EPIGRAPHIC EVIDENCE FOR THE ANTIQUITY OF ARABIAN CULTURE.—At a meeting of the Vienna Academy of Sciences, Professor D. H. Müller presented a work entitled *Epigraphische Denkmäler aus Arabien*, which contained the epigraphic material gathered by J. Euting during his travels in Arabia in 1883 and 1884. These 950 inscriptions fall into three classes. The first includes the *Minyan* monuments of *El 'Öla* which belong to the period in which female regents ruled the tribes of North Arabia, i. e., at about the time of Sargon II of Assyria. The second class, the *Lihjan* inscriptions, is very important for historic, linguistic, and graphic reasons. They prove the existence of a North-Arabian written language 1000 or 1200 years before Mohammed. The *Thamudites* are to be considered as their authors: this people was already mentioned in one of Sargon's inscriptions, was known to the classical geographers, and disappeared from the scene only shortly before the advent of Mohammed. This people calls itself *Lihjan* in the inscriptions, and its Kings, *Kings of Lihjan*. The third class, called the *proto-Arabic*, consists merely of short inscriptions, probably executed by caravans.—*Berl. phil. Woch.*, 1888, No. 28.

YEMEN.—*Inscriptions.*—M. ED. GLASER, who is exploring the Yemen for the third time, from the triple point of view of geography, archaeology, and epigraphy, writes, under date of March 30, that he has already collected 214 inedited inscriptions, 88 of which are at Ma'rib, the capital of the ancient kingdom of Sabá'.—*Revue Critique*, 1888, No. 22.

PALESTINE.

IDENTIFICATION OF MEDIAEVAL CANALS.—At the April meeting of the *Société Asiatique*, M. Clermont-Ganneau proposed to identify the canals of the territory of Acre called *Damor*, *Cabor*, *Broet* and *Tatura*, mentioned in a map of the crusades of the XIII cent., with the present villages of *Dāmoān*, *Kāboul*, *Berouē* and *Tamra*.—*Journal Asiatique*, April–June, p. 535.

JERUSALEM.—Recent Discoveries.—In addition to the discovery of the Byzantine pavement which stood before the group of Constantine's churches at Jerusalem, reported in the January issue of the Palestine Exploration Fund, Herr Schick has sent, for the current number, an account of his further discovery of three granite columns *in situ*, another Byzantine pavement, and the supposed ditch of the long-contested second wall of the city. The three broken granite columns are to the north of the Byzantine pavement, and close to some steps leading to the Koptic convent. These three columns, with a fourth removed about twenty years ago, together with the remains of a pier or stone jamb now laid bare, formed in the Byzantine period the Propylæum of Constantine's church. The columns probably extended further north, but this fact cannot be ascertained on account of the buildings. The wall which now closes the space between the columns was apparently built by the Crusaders. To the south is an old wall, partly Jewish, but principally Byzantine. The lower part of the western wall of the Propylæum is built with drafted stones, and is also of Jewish masonry; higher up it is of Byzantine masonry. This, according to Herr Schick, was the east wall of Constantine's basilica. The southern wall of the basilica was also built on old Jewish masonry, which forms a slightly obtuse angle with the east wall. This angle and the lowest course of stones in the wall are Jewish; the stones of the upper courses are smooth, smaller and Byzantine. Sir Charles Wilson, however, is of opinion that the granite columns may have been part of the main street of the Roman *Ælia*, which, in all probability, was adorned with columns, as in the similar cases of Samaria, Scythopolis, Damascus, Gadara, Gerasa, etc. Moreover, he thinks the ancient masonry now uncovered is not Jewish. In tentative excavations made by him on the same site in 1865 he came to the conclusion that the existing remains belonged to some old church (a very fine font or basin of white marble was found at the same time), a reconstruction after Constantine's churches had been destroyed, probably of the Crusading period.

South of the southern wall of the newly disinterred basilica, Herr Schick has discovered a fine platform, paved with very large, flat, smooth stones. From this raised platform broad steps lead down to a similarly paved platform 9 ft. below. Towards the north, on the site of the conjectured Propylæum, a pavement has been found formed of large stones, exactly laid, with

good joints; the upper surfaces are very smooth, as if originally polished. About the middle of the pavement stands the so-called Greek arch already known to travellers. The Byzantine pavement now unearthed is a continuation of that already discovered and figured in the *P. E. F. Quarterly Statement* for January (*JOURNAL*, p. 86). The original Byzantine pavement, therefore, must have formed at an earlier date a large, free, and open place, or, in other words, a "forum." In the *Assise de Jerusalem* we read that in the thirteenth century there were several market streets in Jerusalem, one of them being an arched market (*la Rue Couverte*) leading to the monastery of the Holy Sepulchre. In this street the Syrians sold cloth, and candles were made. The ruins of these arched shops have now been identified by the German architect. Sir Charles Wilson thinks this pavement may be part of the street of the city of the ancient *Ælia*, the upper part possibly connected with the platform of the pagan temple that preceded the church of Constantine. The lower pavement, he remarks, is on the same level as the floor of the rotunda in the Church of the Holy Sepulchre; the upper one at a slightly lower level than the floor of the Chapel of the Exaltation of the Cross, which is almost due west of it.

If the identifications of Herr Schick are correct, our guide-books to Jerusalem will have to be rewritten. But for the opposition made by the Russian authorities he would have continued his investigations; and now the committee of the P. E. F. have taken steps to bring the excavations to completion by working in coöperation with the Russian society. The Byzantine pavement and structures now identified by Herr Schick appear to occupy an irregular area of about 170 ft. from east to west and 120 ft. from north to south.—*Athenæum*, June 9.

A Roman milestone near Jerusalem.—M. CLERMONT-GANNEAU writes to the *Athenæum* (July 7) in regard to two Roman milestones. The first, which is without inscription, is at the second mile on the ancient Roman road leading from Jerusalem directly north towards Djifné (Gofna) and Nâbulus (Neapolis), which was originally entirely marked out by milestones. At the fifth mile is another milestone whose inscription was partially read by Mommsen and Detlefsen in the *C. I. L.*, III, 117, and dated 162 A. D. The last three lines are now read for the first time as: M. P. V. | ΑΤΤΟ. ΚΟΛ. ΑΙΛΙΑC. ΚΑΠΙΤΩΛ. | ΜΙΛ. ε. The end is thus in Greek, not in Latin; the sigla for *millia passuum quinque*, being followed by ἀπὸ Κολ(ωνίας) Αἰλίας Καπιτωλ(ίνας) Μίλ. ε, "five miles from the Colony of Aelia Capitolina" (Jerusalem). This fact aids in identifying the site of Rama as *er-Râm*, which is one mile N. of this milestone, or six miles north of Jerusalem, where Rama is placed by Eusebios and Hieronymos.

PHOENICIA.

SAÏDA=SIDON.—At the close of April, Hamdi-Bey and Demosthenes Baltazzi recommenced the excavations at the necropolis in five different places. The first researches disclosed an anthropoid sarcophagus of white marble, anciently violet, but in perfect preservation, also iron rings which belonged to coffins.—*Rev. Arch.*, 1888, p. 387.

SYRIA.

SINDJIRLI.—*Cuneiform Inscription.*—The German expedition which has been excavating this spring on the site of the Hittite palace at Sindjirli, in Northern Syria, has discovered among the Hittite sculptures a long and well-preserved cuneiform inscription.—*Academy*, July 21.

ARMENIA.

VANNIC MONUMENTS.—Mr. F. C. CONYBEARE writes to Professor Sayce (*Academy*, July 21): "I found at **EDSCHMIADYIN** seven or eight cuneiform blocks. I also went to **ARMAVIR**, the old Armenian citadel whence they came. Excavation would, I believe, bring many more such blocks to light. Lately the peasants there have dug out a Cyclopean wall composed of huge blocks, neatly cut and laid together without cement. It encompassed the top of the hill on which the citadel was built, and I saw about 100 yards of it uncovered. In one place the mouth of a passage or gallery running into the hill has been brought to light. Such a gallery must lead to chambers cut in the heart of the hill. It is made of very neat masonry. As it was filled with soil to within 18 inches of the roof I could not enter it. The peasants have excavated the wall to depths varying from 6 to 12 feet, intending to roll the stones down the hill-side for their own uses. They have deported a number of blocks, about one meter in size each, to the neighboring village. Luckily the police have put a stop to this vandalism. I saw one block only *in situ* which appeared to have had cuneiform writing upon it, but the characters were utterly effaced.

"At **ANI** also I saw Cyclopean remains in the shape of huge dolmens of unwrought stone. I counted fifteen of them. In three cases there are two side by side, proving that they were not domestic hearths. In all the accounts I have read of Ani I find no notice or explanation of these remains."

ASIA MINOR.

PROFESSOR KIEPERT'S TRIP IN ASIA MINOR.—Professor Kiepert, who is now on a trip through parts of Asia Minor, writes from Adramyti in June. He is travelling with Dr. Fabricius. At the end of May they visited im-

portant ruins near Mesemla, including two theatres with rows of columns still standing, and a well-preserved gate with two towers built of colossal stones. Professor Kiepert expected to return to Berlin in July.—*Berl. phil. Woch.*, 1888, No. 28.

LESSOS.—*The Cities of Arisba and Eresos*.—At the June meeting of the Archæological Society in Berlin, Professor Curtius presented, on the part of Dr. R. Koldewey, the plans of the cities of Arisba and Eresos in Lesbos. The ancient Eresos is surrounded by a polygonal wall with five gates, which encloses the declivities of the mountain, following the crests of the lower heights that surround its base. It is an instructive example of a wall-zone around the base of a hill, and is comparable to Polymedion in the Troad, whose ruins were lately discovered by Joseph Thacher Clarke (*cf.*, also, the nine-gated Pelargikon in Athens).—*Berl. phil. Woch.*, 1888, Nos. 29–30.

MAGNESIA (near).—*Mount Sipylus—Tantalos, Kybele, and Pelops*.—Carl Humann has an interesting paper on Mt. Sipylus in the Athens *Mittheilungen*, in which he shows the absurdity of Mr. Schweistal's claim to the discovery of the celebrated Niobe (*Gazette Arch.*, XII, p. 213). Herr Humann has discovered the real Kybele, and also the throne of Pelops, as well as a number of ruins of early dwelling-places on the plateau, which, if cleared of *débris*, would yield, in his opinion, interesting early pottery. He gives a plate of the seated Kybele. He believes he has identified the akropolis of Tantalos.

PERGAMON (neighborhood of).—Herr C. SCHUCHARDT, continuing his communications to the Royal Academy of Sciences in Berlin (already noticed on p. 87 of the JOURNAL) regarding the ruins in the region around Pergamon, spoke of the discoveries made by him during July, August, and September of 1887. The ruins of Atarneus, with its triple wall and towers, were examined and a plan made. In the Kara-dagh region, on a tongue of land near Adjano, was found a ruined city (Kane?) with two harbors. Its akropolis was on a hill called Tschifut-kaleh. A line marked by three forts connects it with Pergamon. Fourteen forts and towers were found in this region, all of Hellenistic times. Northward from Soma to Kiresen, at regular intervals of between two and three hours, were small settlements, probably Roman camps. From Klinik southward to Saritscham was an unknown region in which many fortified places were found: most imposing was a site at Mamurt-kalessi, near Karalan, whose temple is a mass of ruins so that its plan cannot be made out. But, from the ruins lying about everywhere, the style is seen to be Doric of the Hellenistic period. It was found that, to the W. and S. W., the Hyrkanian coast and as far as the sources of the Kaikos was possessed by Macedonian colonies before the rise of the Pergamenian power. In September, the investigation of the Aiolian coast was commenced. On the small peninsula of Tschifut-kaleh the site

of Grynion was recognized. The lower prehistoric town of Usun Hassanli was surveyed, so much more interesting than that further to the West. Sayce wrongly calls it Hittite. A half-hour to the South, opposite the town, is a prehistoric nekropolis in which the graves are built in circular strata, as at Mykenai, and are supported on the side of the declivity by Cyclopean walls.—*Berl. phil. Woch.*, 1888, No. 26.

SMYRNA (near).—*Pelasgic Fortress*.—A Belgian archæologist, M. MARTIN SCHWEISTHAL, who went to Asia Minor to explore Mount Sipylus, so famous in Greek mythology, has just discovered, in Yamandar-dagh, near Smyrna, a vast Pelasgic fortress, comprising a citadel with three fortified walls, and many other constructions the purpose of which is unknown. M. Schweisthal, who was accompanied by Dr. K. Bursch, of Kiel, proposes to study, in detail, this fortress more than three thousand years old. M. Schweisthal is also able to state the existence of a long strategical line of fortifications, designed to guarantee Mount Sipylus from invasion.—*Cour. de l'Art*, 1888, No. 37.

Colossal bust of Apollon.—A correspondent, writing from Constantinople to the *Frankfurter Zeitung*, states that a white marble bust of Apollo has arrived there lately from Smyrna, along with other antiquities found in the course of excavations in the neighborhood of that city. The bust is of about twice the natural size, and of wonderful beauty. Connoisseurs assign it to the school of Praxiteles. A head of Juno and one of a Roman Emperor are among the sculptures found.—*London Times*, April 23.

TRALLEIS.—*Sculpture*.—In the upper part of the city some workmen found two important pieces of sculpture: one is the statue of a draped female, double life-size, headless and armless; the other is an admirably-preserved colossal bust, made the subject of a paper by M. Collignon in the *Revue Arch.* for May-June (pp. 289-95; pl. xiv): though very effeminate, it is judged to be a head of Dionysos.

KYPROS.

Mr. T. CHAMBERLAIN through Comte de Mas-Latrie communicated to the *Académie des Inscriptions* (June 1) two monuments of the Middle Ages recently discovered in the island. Both are important for the history of the Christian kingdom of Kypros. One is the tomb of a son of king Hugues IV of Lusignan, the other that of Adam of Antioch, Marshal of the kingdom of Kypros in the XIII century.—*Revue Critique*, 1888, No. 24.

AMARGETTI (Papho).—Mr. Hogarth writes under dates of May 19 and 23 concerning the excavations which he is conducting for the "Cyprus Exploration Fund:"

"We have now had nine days' dig in various quarters in and about this village, and have, I think, discovered the two main facts about it—its an-

cient name and its peculiar cult. While making trials elsewhere, I have dug consistently in the vineyard whence the antiquities for which the place has been long known in the district seem almost without exception to have come, and from it have unearthed about a hundred and twenty objects, mostly statuettes, whole or fragmentary, made of very soft sandy stone, and often of the rudest workmanship. Many have decided phallic characteristics, others hold a bird or bunch of grapes in the left hand, and generally an apple in the right; the same bird appears by itself in many instances, and when large appears to be a dove. Among the find are a number of terracottas, many of which one would have called archaic if their surroundings were not so distinctly late; and eleven bases on which inscriptions are cut or roughly scratched. Of these, nine, and probably ten, bear a dedication to *Opaon Melanthios* (Ὀπάων Μελανθίω), from which I conclude that the name of the place is Melantha or Melanthos. Possibly a trace of the name survives in the neighboring Marathounda or Malathounta.

"That the place was quite small and rustic appears from the character of such remains of buildings as I can find. In the present village of Amargetti I have found some walls of late date only, in digging near which I obtained three specimens of the *μαρροῦθια* for which the place is famous; they turn out to be little bronze figures of quite late period. The tombs lie on the steep rocky hill north of the site, but, as might be expected from the rustic character of the other remains, their contents do not repay much exploration. I have planned and photographed the site, and out of two or three hundred *disjecta membra* have selected all that were in any decent state of preservation or seemed to have any significance. With, perhaps, two exceptions, the inscriptions are certainly not early. I made out an inscription scratched on the drapery of a statuette over the right leg, thus:

ΛΙΓΑΠΟΛΩΝΙΜΕ|ΛΑΘΙΩΦΑΛΙΑΙΧΟC|/////Χ////////

Λεγ' Ἀπόλωνι Μελανθίω φαλίαχος [εὐ]χ[ην].

As it comes from the same spot as all the others, it seems probable that the full title of the god of Melantha was Apollo Opaon. Apollo Hylates was worshipped in early days at the neighboring Drimu (*vid.* Cypriote inscription from there), and is perhaps, under one form or another, the dominant divinity of this hill-country. I found three sites not marked in the Ordnance map—one near Prætori, and two (one of which is, I think, a small temple) near Pentalia."—*Athenæum*, June 16.

EUROPE.

GREECE.

FRAUDULENT EXPORTATION OF ANTIQUITIES.—For some time, the trade in Greek antiquities with Paris and London has been on the increase,

notwithstanding the law against it. It was lately discovered that a well-known Athenian lawyer sent, every year, large lots of works of art to a go-between living in Paris on the Champs-Élysées. Among the latest works is a bust of Athena in Pentelic marble catalogued as recently discovered at Athens, as having on its head a crown enclosing a miniature representation of the Akropolis, with the Parthenon, Erechtheion, *etc.*, and as being a work of about 200 B. C. It must be a barefaced forgery. Mr. Manolopoulos, vice-consul of Greece in Paris, was charged by his government to make an enquiry. In consequence, a committee was sent to Paris to demand the seizure of the exported works, and a number of Tanagra statuettes were confiscated in one house, in another, ancient jewelry of great value and vases of the best period, while a third person returned three cases of antiquities. Enquiries are continuing.—*Paris Temps*, May 26; *Rev. Arch.*, 1888, p. 365.

NEW NAMES OF GREEK VASE-PAINTERS.—The exhibition at the Burlington Fine-Arts Club, London, of Mr. van Branteghem's collection of Greek vases is quite a revelation. Two of his masters—OIKOPHELES, an archaic artist, and XENOTIMOS, a red-fig. painter of fine style—are hitherto unknown.—*Class. Review*, June, 1888, p. 189.

TWO IMPORTANT WORKS on the antiquities of the Grecian islands *Leros* and *Pholegandros*, the former by Dr. Oekonomopulos and the latter by Mr. Charkilaou, have just appeared in Athens.—*Athenæum*, Sept. 8.

AMORGOS (Island of).—The following additional details are taken from the Report addressed by M. GASTON DESCHAMPS, who directed the excavations, to the Director of the French School at Athens. The excavations lasted from Feb. 16 to April 11, and were successively carried on at three points, (1) the akropolis of Minoa and the village of Katapola; (2) the akropolis of Arkesine at Kastri; (3) at Vighla, near the village of Tholaria, the supposed site of the ancient Aigiale:—**MINOA**.—*Architecture*.—A small monument 5.25 met. wide of hard gray stone; a flight of 5 steps leads to a vestibule in front of a rectangular chamber. *Katapola*.—A trench opened near the church of the Virgin along a row of three columns, still standing, brought to light, at two points, a mosaic pavement which belonged to a Byzantine church or perhaps to a Roman building. At the same spot was found a Doric capital in black marble, whose flat and retreating echinus is compressed under the abacus; also an Ionic base and two capitals: Ross places here the site of a temple of Pythian Apollo.—*Inscriptions*.—Among the inscriptions is a decree of the Samians living at Minoa in favor of Hegesareté, daughter of Ainesekrates, containing new details regarding the calender of Amorgos and the religious affairs of the city (62 lines).—*Small objects*.—On the akropolis, below the monument above mentioned and near the Pelasgic wall, were found a large number of small objects: fragments of figurines, vases, inscribed handles of amphoræ,

lamps, glass objects, weights, terracotta pyramids, discs, needles in bone and ivory. To be noted are a terracotta mask of good workmanship, and a circular plaque with a relief of the combat of a warrior and an amazon; also a tomb containing bronze fibulae and bracelets, and a gold fibula. **ARKESINE.**—Explorations were much limited by the prevalence of cultivated land, on the spot where a three-sided altar and two marble heads were found last year. Work was almost exclusively confined to the narrow platform of the akropolis where some inscriptions were found, notably an archaic one in boustrophedon. The marble heads (now in the Museum at Athens) were of Asklepios and Hygieia, of good art of the Alexandrian period, IV century B. C., that of Asklepios being similar to one in the Brit. Mus. called Asklepios by Brunn, and Zeus by Overbeck. **AIGIALE (Vighla).**—A marble block bearing the name of *Apollon Prophylax*; the lower part of a draped statue; inscribed handles of amphorae; coins; fragments of vases, etc.; a dedication to Eileithyia, and two lists of epheboi and gynasiarchs.—*Bull. Corr. Hellén.*, April, 1888.

ARKADIA.—Near the large bridge on the road between Tripolitza and Myloi in Arkadia, a peasant, in digging, has found various antiquities. Amongst these is a bronze statuette, without feet, but otherwise well preserved, representing Artemis stretching a bow and with a quiver slung on her back. It is of a good period.—*Athenæum*, July 28.

ATHENS.—**EXCAVATIONS ON THE AKROPOLIS.**—The excavations on the Akropolis are being carried under the museum, by means of shafts sunk both inside and outside the building. This southeast corner of the Athenian rock-fortress had never yet been explored. Among the objects unearthed on this site is the fragment of a vase, with the inscription of the artist Nikosthenes.

In April and May, to the S. of the Parthenon and W. of the Museum, excavations were carried down to the rock: just above it was a layer of earth, two met. deep, anterior to Kimon's Parthenon, which contained only very early objects. Here were found the foundation-walls of some Pelasgic houses, of quarried stone and clay bricks, over against the wall built, during and after the erection of the Parthenon, from remains and fragments. Various fragments of vases painted in the Mykenai style were found among them, but the most curious discovery was that of a store of implements in a recess in one of the walls. It comprised a hammer, ten hatchets, four chisels, a file, two knives, a lance-head, a sword, and some other objects, all of bronze, with fragments of wooden handles in some cases adhering. The find has just been noticed in the *Bulletin* of the French School, and in the *Mittheilungen* (vol. XIII, 1) of the German School. By the S. W. corner of the museum a large and well-preserved piece of the old Pelasgic city-wall came to light. This, together with the piece previously found to the W. of

the museum, shows that the entire S. E. corner of the citadel was surrounded by a strong Pelasgic wall still preserved wherever it lay inside of Kimon's wall. The remaining fragments follow the formation of the rock, and it will probably be possible, at the close of the excavations, to reconstruct the entire ancient circuit of wall.—*Athenæum*, June 9, 23.

In this S. E. corner are now evident three superimposed strata corresponding to as many historical and archæological periods: (1) the Pelasgo-Mykenaian stratum; (2) a tufa-bed supported by a wall which stops at a distance of about ten met. from the Akropolis rampart, and is full of constructions and sculptures of the same material, anterior to the Medic wars; (3) the third stratum of Kimon, formed of transported earth and blocks, in which the few fragments that have been found are of marble.—*Revue Études Grecques*, 1888, p. 240.

Another figure of poros stone is much under life-size, and lacks its head, arms, and legs from the middle of the thighs (height 27 cent.). The shoulders are broad, the waist small, and the hips immense. The figure turns to the r., advancing the r. leg. It is robed in two garments. The under one is a close-fitting tunic, apparently of soft leather, covering the shoulders (not the arms) and moulding the body to the hips. It is painted blue, and ends in a wide red border: the seams are marked by lines of dots painted red. Over this is a singular garment: a skin of an animal falls from the left shoulder in a narrow strip, encircles the body to right and left, and finally falls in front: it is painted a bright red. This figure was still attached to the piece of poros out of which it was cut as a high-relief.

Two days after the discovery of this piece, was found a female head in poros, 13 cent. high, with flat smiling face, large eyes, and long wavy hair that falls on each side in two masses. M. Kabbadias thinks that it belongs to the previous figure, which he calls an amazon.

Many fragments of a serpent's body, in poros, have come to light in addition to those already found.—*Bull. Corr. Hellén.*, April, pp. 334-36.

Small bronzes.—The collection of small bronzes has been enriched. None of the objects newly discovered can compare for artistic merit with the statuette of Apollon mentioned in the *Bull. Corr. Hellén.*, for March, but the following are of interest: a nude man, very muscular, in the act of throwing a stone; several griffin-heads, one of which is of large dimensions and like those of Olympia; a bronze plaque with four lines of a very ancient inscription (in which the *koppa* is used) regarding the treasurers of the goddess.—*Bull. Corr. Hellén.*, April, p. 336.

A bronze Athena Promachos of the VI cent. is of interest. It bears the inscription, *Μελισσῶ ἀνέθηκεν δεκάτην τ' Ἀθηναίᾳ*. A striking feature is the enormous crested helmet, in itself half the height of the remainder of the figure.—*Journ. Hellenic Studies*, 1888, p. 124.

To the same series of small bronzes belong the following pieces. Statuette of a youth standing with both hands raised, nude and with uncovered head (*cf. Jahrbuch.*, I, pl. 9; II, p. 95). Statuette of a standing youth, 27 cent. high, holding an attribute in both hands; in type it is Aiginetan, and it shows greater excellence in conception than in execution: it is of the usual "Apollo" type, and is considered by Kabbadias to be a chef-d'œuvre of advanced archaism. A very archaic but carefully-executed little figure is that of a centaur, bearded and running to the right, whose fore-legs are still human. One of the best preserved is the statuette of a bearded man in the position of the "Jupiter tonans," but holding a stone.—*Mittheil. Athen.*, XIII, 1, p. 108.

Lying on the bare surface of the rock was found a red-figured vase. Among other discoveries are (1) an archaic marble female head, half-life-size; (2) a fragment of a marble slab with an inscription painted in red letters ΑΥΞΙΑΞ ΚΑΛΟΞ; (3) a terracotta tablet with chariot race; (4) rim of a black vase with the inscription Ορειβελος εποισεν Φειρος τις Αθε[ναίης]; (5), in the midst of a heap of poros chips, a wedge-shaped four-cornered pointed stone with the inscription Αυσιβ[ε]λος Μικελωνα φιλε[ι]ν φεσι μαλίσστα | τον εν | τει πο[λ]λει ανδρε[ι]ος | γαρ εστ[ι]ν. From the form of the letters Kabbadias judges this inscription to belong to the middle of the fifth century, though it possibly may antedate the Persian wars.—*Αρχ. Δελτίον*, March.

On May 17, according to the *Εφημερίς*, there were found: (1) the Amazon of poros stone, one-third life-size, mentioned above; (2) the head of a bearded man of the same size, also of poros; (3) an archaic bronze charioteer—all in good preservation. The bearded head (2) is less than life-size, and was affixed to the body by a spike. The hair is divided in the centre and falls back in a mass of fine curls cut square on the neck, and is bound by a ribbon. The mouth is shaven, and of delicate shape; the beard is left on the cheeks and chin. The eyebrows, eyelids and iris are painted black.—*Berl. phil. Woch.*, 1888, No. 23; *Bull. Corr. Hellén.*, May-Nov., p. 433.

Among the sculptures are, also, a small bronze group of a man riding on a dolphin; the half of a colossal head in poros which fits into a previously-found fragment.—*Αρχ. Δελτίον*, April: *cf. Berl. phil. Woch.*, 1888, No. 25.

Inscribed bronze Tablet.—Between the Akropolis Museum and the southern outer wall, was found a very old bronze plate, with holes for nailing up, which contains the beginning of a dedicatory inscription of the sixth century: [Η]οί ταμίαι τάδε χαλκία | συλλέξαντες Διὸς κρατερ[ό]φρονι κούρη ἀνέθηκαν; | Ἰ'Αναξίων καὶ Εὐδίκος καὶ Σ. . . . | καὶ Ἀνδοκίδης καὶ Λυσίμα[χος] The most characteristic letters Θ and Η are not present: the presence of the *koppa* (Ϟ) is remarkable, and as it is very rare in Attic inscriptions, and as the only two instances on stone are boustrophedon, it is probable that this bronze tablet dates shortly after the change from boustrophedon writing

to that from left to right: cf. also the form Σ for the σ . The date seems to be the middle of the sixth century.

Between the Parthenon and the southern wall of the Akropolis, part of a fluted column has been found with the inscription Πύθις ἐποίησεν. Ἐπιτέλες ἀνέθηκεν ἀ[παρχὴν τῆ] Ἀθυναίᾳ. Further objects of interest are (1) a headless and footless bronze statuette of Athena; (2) a black-figured vase with a picture of a spring inscribed Καλλιρόε. In the same region four small tombs were found.—*Ἀρχ. Δελτίον*, May.

Sepulchral Stele.—An immense stele, two met. high, has been seized in the house of Epam. Skarvouri. It represents, in relief, two women clasping each other's hands in the presence of a bearded man and a young female attendant: the style is fine and the preservation good.—*Ἐφημερίς*, Apr. 21.

According to a telegram from Athens, July 17, a basrelief was discovered that day on the Akropolis, in excellent preservation, representing Athena helmeted and leaning on her spear. The peculiarity reported is that the goddess bears an unmistakable expression of sadness, which is said to be hitherto unknown.—*Academy*, July 21.

Archaic marble sculptures.—Among the early sculptures in marble lately found on the Akropolis are some of remarkable interest and beauty: (1) a beardless male head, less than life-size, with cavities for eyes (orig. filled with glass or metal) and curiously arranged hair, which after undulating toward the metal circle that surrounds the head is twisted around it and falls in curls forming a sort of crown, while in front it is tightly frizzled. The chin is strong, the lips thin, the nose and ears delicate, but the face is expressionless. It seems a work of the first years of the v cent., still slightly savoring of archaism. It has been fitted by M. Kabbadias onto a torso found near the Parthenon in 1866, to which A. Furtwängler had added another head in 1878. M. Lechat, in the *Bull. Corr. Hellén.*, p. 435, doubts, for several good reasons, the correctness of this recent restoration and prefers the former by Furtwängler, especially because the head is that of a youth older than the torso. (2) In 1886, M. Studniczka (*Mittheil.*, p. 185) recognized a large marble statue of Athena in the museum to be the central figure of a gable-group. Some more pieces of this statue have come to light: part of the right shoulder and the right foot and fore-leg, which indicate an attitude of rapid motion. (3) Between the museum and the wall of Kimon has been found the white marble statue of a Niké, winged and running. It is headless and footless and partly armless. The bust is facing, while the lower part is in profile. The hair, painted red, filled the back of the neck and the shoulders between the wings. The garments were a close-fitting tunic with short sleeves and a mantle that falls in regular folds, the border of which is painted. It is of advanced archaic art. (4) A fragmentary female statue, less than life-size, recently excavated was found to fit

certain that these ancient poros statues were entirely painted, the holes and cracks in the stone being hidden under a thick coating of color.

REPORTS OF DISCOVERIES ON THE AKROPOLIS.—Very full reports of the discoveries on the Akropolis are now being published in the foremost archaeological reviews. Besides the *Δελτίον*, the *Ἐφημερίς*, and other Greek publications, we will mention the French *Bulletin de Correspondance Hellénique* (bi-monthly) and *Revue des Études Grecques* (quarterly), the German *Mittheilungen* of Athens (quarterly), the English *Journal of Hellenic Studies* (semi-annually), as well as the excellent *résumé* given by M. Salomon Reinach in the *Revue Archéologique*. The "head of a Triton," an archaic colored female figure holding crown and vase (No. 63 *Mus. Cat.*) and the semi-archaic head of a youth, less than life-size, comparable to the Apollon at Olympia, are published in the last numbers of the *Journ. Hell. Stud.* (April, 1888, pp. 121-3).

M. Theoxenou has published in late numbers of the *Gazette Archéologique* a series of valuable articles (accompanied by heliotype plates) on the archaic sculptures discovered during the last few years on the Akropolis. His work consists partly in an enumeration of all the discoveries and a careful description of them, and partly in a critical study of their types and classes.

RECONSTRUCTION OF THE ARCHAIC POROS GABLE-RELIEFS REPRESENTING THE EXPLOITS OF HERAKLES.

1. *Herakles and Triton*.—One archaic poros gable representing this scene has been in the Akropolis museum since 1882. A second has been reconstructed by Kabbadias from the fragments recently found and described in the JOURNAL. In the former group, the figures present their left sides, in the latter their right sides, but the grouping is the same. The latter is a larger and finer work and is better preserved.

2. *Herakles and the Hydra*.—Besides one relief already known, it seems probable that several pieces of a serpent recently found belong to a second Hydra which would correspond to the second example of the Triton scene.

3. *Herakles and the Nemean Lion*.—Numerous fragments of a lion belonging to this scene have lately been found: among them are part of the head, of the mane, and two paws. This figure was of colossal dimensions, elaborately painted, and of the same archaic style as the foregoing groups.

4. *Herakles and the Kretan Bull*.—Numerous fragments of a bull have been put together.—*Bull. Corr. Hellén.*, May-Nov., 1888, pp. 430-33; *Mittheil. Athen.*, XIII, 1, p. 107.

EXCAVATIONS AT THE TEMPLE OF ZEUS OLYMPIOS.—Near the Olympieion have been found, besides the drum of a column belonging probably to the Peisistratid temple, and some Ionic capitals, (1) a plinth with a relief of a bull and a horn of Amaltheia; (2) a portrait-head of a man and a head of a youth, both of Roman workmanship; (3) two sepulchral in-

scriptions; (4) a nude statue resembling the so-called Apollon on the *omphalos*; (5) a colossal bust of a bearded man; (6) a headless statue of Herakles.—*Berl. phil. Woch.*, 1888, No. 28; 'Αρχ. Δελτίον, March, May.

In the excavation of the north side of the peribolos of the temple have been found the bases and pedestals of statues placed at equal distances one from the other, and forming an unbroken line along this side of the peribolos; as also some fragments of statues and two broken marble heads representing bearded men.

Near the Olympieion has been found a magnificent statue of Antinous without arms; some fragments of the latter, a head and part of a statue of Hadrian, and another small head of another statue were found at the same time.—*Athenæum*, June 9, 30.

THE CENTRAL MUSEUM.—*Additions*.—The 'Αρχ. Δελτίον enumerates 111 additions to the museum during the months of March, April, and May. The objects mentioned are sculptures, vases, terracottas, inscriptions, coins, and various utensils, found in various parts of the Hellenic kingdom.

Two vases of some importance for the history of art have been placed lately in the Museum: one is a red-figured phiale, on which is seen a *hoplites* on bended knee, and underneath the artist's name, *Phintias*; the other is a *lekkythos* with the artist's signature, *Mys*. Both were found at Tanagra.—*Athenæum*, Sept. 8.

A catalogue of the inscriptions in the Central Museum is in preparation. The work has been confided to Dr. Lolling, who has already succeeded in putting together many fragments of inscriptions some of which had been previously published separately.—'Αρχ. Δελτίον, May.

PHOENICIAN SITULA IN THE ATHENS MUSEUM.—That bronze articles for various purposes were widely distributed throughout the countries bordering the Mediterranean is well known; but the specimens still existing that can be safely asserted to be Phœnician are exceedingly rare in Europe. There is one in the Athens Museum about which there can be little doubt; and, as its workmanship, and to some extent its decorative motives, bear certain affinities to the *situlae* of Este and Bologna, a description of it may be serviceable to those unacquainted with the original. I transcribe the following from my sketch-and-note book: "Flat circular bowl in bronze, 8½ inches in diameter, about 1⅞ inch in thickness, worn into holes in two or three places. There is an ancient repair of ¼ inch square. The inside, which shows the decoration, has a brown patina, is worn, but little damaged. The reverse is considerably eaten (washed with acid?), and is of a pale brass color; on this side there is an Aramaic inscription in small characters. The decoration consists of a central eight-rayed star, 3 inches in diameter, with small rosettes between the rays, star and rosettes being incised; then comes a band of figure decoration, framed at the rim with an ornamentation of

chain pattern. The figure subjects are contained in eight panels, four small and four larger, the former comprising two motives, alternately a single figure of a god and of a goddess standing between two columns with lotus capitals. The goddess is a nude figure, each hand holding a breast, in the manner of the figures of Astarte. The hair is massed, falling to shoulders, the head surmounted with a winged globe; so also is the head of the god; his hair is similar to that of the other figure, the face is bearded, his arms are pendent. The space between the figures and the columns is enriched with an engraved trellis in diamond shapes, each interstice having an embossed dot. The four larger panels have for subjects:—(1) A seated female suckling a child; before her stands a table or altar holding food (?), then a standing figure who faces her, his raised right hand holding a cup. The female figure has evidently been suggested by the well-known group of Isis and Horus. (2) A group of three musicians, the first walking and playing a harp, the second dancing and striking a tambourine, the third walking and playing a double flute. (3) Two armed figures facing each other. The man to the right holds a spear in both hands; his helmet resembles the crown of Upper Egypt, his dress is a long tunic; behind him writhes a serpent. His opponent has a drawn sword in his right hand, his left on the head of a winged beast in violent action; this figure has no headdress. (4) A seated male figure, holding a cup in right hand and flower (?) in left hand; before him a table with food. A second figure stands facing him with right arm lifted, an object in the hand; the seat here is a raised throne with footstool. The tables or altars are elegant in design, composed of animal forms. Throughout the costume is Egyptian. It is difficult to speak positively of the type of face on account of the small size and the rubbing from usage, but it is scarcely distinctively Egyptian. The figures are six heads high, proportion of limbs fairly preserved: the modelling equally convex, with no attempt at rendering planes: the action of the dancing figure with tossed hair suggestive of method of representation in archaic fictile vases. General impression: a direct influence of Egyptian art, but not the work of an Egyptian artist. The artist appears to have copied motives whose meaning he did not fully comprehend, or he may have intentionally changed their purport; in any case there is an apparent absence of spontaneity. The bowl was discovered at Olympia some years ago, before the late excavations: it is probably votive."—X. in *Athenæum*, July 7.

NOTES ON EARLY VASES WITH INSCRIPTIONS IN THE MUSEUMS OF ATHENS.—Mr. CECIL TORR has sent a series of notes upon vases in the museums of Athens. Akropolis Museum: (1) Signature of *Myson* on a red-fig. vase; (2) boustroph. signature of *Aischines* on a black-fig. vase (Eφ. 'Αρχ., 1883, p. 37); a capital formerly carrying some object like a vase is inscribed: ΔΙΣ+ΙΝΕΣΑΝΕΘΕΚΕΝ|ΑΘΕΝΑΙΑΙΤΟΔΑΛΜΑ|

ΕΥ+ΣΑΜΕΝΟΣΔΕΚΑΤΕΝΠΑΙΔΙΔΙΟΣ|ΜΕΛΛΑΛΟ; (3) red-fig. fragment, perhaps of a krater; powerful style, with Ὀλυ(μ)πίω[δωρος?] κα[λός]; (4) black-fig. bottom of kylix, with Ἀθην[όδοτος(?)κ]αλός; (5) black-fig. plaque with Γλαυκύτης(?) καλός; (6) handle of a red-fig. kylix, incised with Ἰέρων ἐποίησεν; (12) lekythos, black outline on white; winged woman running, with ΛΑΥΚΟΝΚΑΛΟΣ, a new addition to the Glaukon vases; (14) in the Akropolis Museum, just found, the neck of a vase in fragments, all black, incised: ΟΡΕΙΒΕΛΟΣ ΙΕΡΟΣ ΑΘΗΝΑΣ ΕΠΟΙΕΣΕΝ: the name *Oreibelos* is certain: *ιερός*, if accurate, = *ιερόδουλος*, giving a new and interesting light upon the social status of the vase-painter and potter in ancient Athens.—*Classical Review*, June, 1888, pp. 188–89.

FORGOTTEN ANTIQUITIES.—MARY C. DAWES communicates to the *Academy* (Sept. 8) a translation from the *Ephemeris* (of Athens) of an article which draws attention to certain forgotten remains of antiquity, with a view to urge further exploration. These remains consist of an extensive system of water-conduits, and a large reservoir with 258 small pillars, and they are situated under the Russian church in Athens. They were discovered in 1852–56 while excavating the circuit of the church of St. Nikodemos.

THE OLD PARTHENON OR THE OLD ERECHTHEION.—In a letter published in the *Revue Arch.* for May–June, a French architect, M. Laloux, discussed the substructures of the great Doric temple found near the Erechtheion. As against Dr. Dörpfeld, who considers it to be the old Peisistratidean Parthenon, he affirms that it is the old Erechtheion: that the fragments of archaic gable-sculptures found to the E. of the present Parthenon cannot belong to it, but come from a building erected on the same site as the Parthenon of Iktinos.—*Revue Arch.*, 1888, pp. 398–400.

DAPHNE.—On the outer face of the east wall of the narthex of the monastery of Daphne has been discovered, under a coating of lime, a very fine representation of a Byzantine emperor, with his head crowned and in the act of reading a decree which he holds in his hands.—*Athenæum*, June 23.

DELOS.—M. HOMOLLE made a communication to the *Soc. nat. des antiquaires de France* (June 20) concerning an archaic base found by him at Delos. This monument, of triangular form, has, at the corners, two *gorgoneia* and a ram-head. On the upper surface are still to be seen the feet of the statue, which must have been that of Apollon. The marble bears the signature of the sculptor Iphikratides of Naxos, of the VII cent. B. C., the most ancient artist's signature that is known.—*Revue Critique*, 1888, No. 28.

EPIDAUROS.—*Probable original by Polykleitos*.—M. GEORGES PERROT, at the sitting of June 22, *Acad. des Inscriptions*, called attention (from information transmitted to him by M. Guillaume) to a probably original work of Polykleitos which has recently been discovered at Epidauros. It is a capital found on the site of a temple, built, according to ancient tradition,

by Polykleitos, who was both sculptor and architect. This fragment is, it appears, beautiful enough to be ascribed to the chisel of this great sculptor.—*Revue Critique*, 1888, No. 27.

MOUNT LYKONE.—*Discovery of the Temple of Artemis Orthia.*—Pausanias (II. 24. 6) mentions a temple of Artemis Orthia on the Argolic mountain Lykone, which in ancient times was partly covered with cypresses, and onto the eastern spurs of which the rocky cone of the Larissa of Argos joins. He adds that in this temple were placed statues of Apollon, Leto, and Artemis: they were of white marble, and, according to tradition, were the work of Polykleitos.

The remains of this Temple on the summit of Lykone have been discovered by the Director of the Gymnasium at Nauplia, M. J. Kophiniotis. At the foot of the mount he found fragments of pottery and bits of brick: on the summit there was a levelled space strewn with small worked stones and fragments of pottery: below and around lay great squared blocks of good workmanship, which seem to have formed the *peribolos* of the ancient Temple of Artemis Orthia. The discoverer at once sent word to the Minister of Public Instruction, and requested permission to excavate, and this has been received.—SPYR. P. LAMBROS, in *Athenæum*, June 23.

MANTINEIA.—The French School have discovered at Mantinea a semi-circular building of the Roman period, 38 meters in diameter. Near this building are remains of large double stoai, which probably belonged to the gymnasium. They have found 85 bronze Roman coins and 83 *tesserae* of terracotta, small discs which probably served as tickets for entrance to the theatre. Each ticket is inscribed with a name. Several votive inscriptions have been found, and one honorary decree in which, besides the *βουλή*, the *σύνεδροι* are mentioned.—*Ἀρχ. Δελτίον*, April, May; *Athenæum*, June 9.

Early Stele.—In July 1887, a stele was found near the S. wall of the *skênê*. It is of granular white marble, broken at left side and top, and measures at present 1.48 met. in height. It is entirely filled with the relief of a life-size youthful figure, standing and robed in the sleeveless double chiton like that of the girls on the Parthenon frieze and the Caryatides of the Erechtheion. The figure is turned $\frac{1}{4}$ to the right and holds in her left hand a curious attribute which seems to be a liver. The palm-tree on the left, a tree consecrated to Leto, who had a temple at Mantinea, would indicate that this was a votive stele to that goddess, with the figure of one of her priestesses. The style of the relief is early, broad, and carefully realistic, though rather heavy. It is not archaic, but probably is a local Dorian work of the close of the fifth century B. C.—*Bull. Corr. Hellén.*, 1888, May-Nov., pp. 376–80.

MYKENAI.—*Prehistoric tombs.*—M. TSOUNTAS has excavated fifteen tombs of the Mykenaian period, twelve to the north and three to the west of the

ancient city: one of these, of domical shape, had been violated *ab antiquo*; the others resemble the tombs cut in the rock at Nauplia. The discoveries consist of objects in gold and glass-paste, also some carved ivories, a considerable number of engraved stones (gems) of the Islands, and two very simple bronze fibulae, the first discovered at Mykenai.

Dr. Schuchardt read two important papers on the royal tombs of Mykenai before the Archæological Society of Berlin at its meetings in March and May. He concludes (1) that the fragments of vases in the tombs are not of the same period as the fragments *aus dem Schutt*, as thought by MM. Furtwängler and Loeschke; (2) that the wall-paintings in the palace are of the same style as the contents of the tombs, so there can be no question of Karian importations, but everything is of Achaian art. He explains how at this early period there were no temples, but chapels in the centre of the royal palaces, thus explaining Odyssey η. 79.—*Revue Arch.*, 1888, pp. 372-3: cf. *Berl. phil. Woch.*, pp. 542, 703.

PEIRAIEUS.—*Ancient fortifications*.—In March 1887, the French School undertook excavations at the Peiraieus on the site of the ancient walls of Eëtionieia, of which an account was given in the *Bull. Corr. Hellén.*, xi, pp. 201 *sqq.*, cf. pp. 129-44 (summed in *JOURNAL*, iii, pp. 213, 215). Work was soon interrupted: it was taken up and finished in January of this year, and the results are very completely stated by M. H. Lechat in the May-Nov. number of the *Bull. Corr. Hellén.* (cf. *JOURNAL*, iv, pp. 57, 98). The Aphrodision of Themistokles was not found, as was hoped. The fortress of Eëtionieia was composed, roughly speaking, of two walls intersecting at right angles. In order to strengthen the wall, the angle was made less sharp by a second angle, which, however, was protected on the north by a circular tower, near which is a second, an entrance being between them. These towers were quite solid, and penetrated the wall they protected to about a quarter of their circumference: they were joined to the wall by a staircase. A third and larger (square) tower, probably an addition, was placed on the N. W. side. These fortifications are interesting for the study of the siege and defense tactics of the Greeks. The date of the building is shown by two inscriptions to be 394 to 391 B. C.

Recent finds.—In the excavations made in consequence of the discovery of the torso of Æsculapius, near the Tsocha Theatre have been found the fragment of an akroterion ornamented with a group of serpents, and another of a votive relief bearing an inscription; also a piece of mosaic pavement and a door-plinth, both Byzantine.—*Athenæum*, Sept. 8.

TANAGRA.—Excavations at Tanagra are described, in detail, in the *Ἀρχ. Δελτίον* (March-May). In March were found numerous vases and terracottas, besides nine simple sepulchral inscriptions. In April many graves were opened, in which were vases and terracottas, many of them of archaic

style. In May the objects found were vases, terracottas, and bronze needles, besides five sepulchral inscriptions of which two are fragmentary.

THEBES—Excavations at the temple of the Kabeiroi, near Thebes, were resumed by the German Institute March 30 and closed April 9. The foundations of the temple were completely uncovered. Some small bronze and terracotta figures of animals and fragments of vases were found: besides these, a headless marble statue (height 1.40 met.) of Roman workmanship and a pedestal with an honorary decree.—*Ἀρχ. Δελτίον*, April.

KRETE.

CATALOGUE OF THE MUSEUM OF HERAKLEIA.—The *Syllogos* of Herakleia has published a volume which contains an account of the excavations at the grottoes of Eileithyia and at Lasithios, an account of the antiquities added during the year, and a complete catalogue of the museum. Among the objects, the following are noticed by M. Reinach (*Rev. arch.*, p. 379): Nos. 33, a helmeted head of Athena from Knossos; 38, a statuette of Hygieia; 57–60, busts of Germanicus, Agrippina, Tiberius and Caligula; 64, Hermes (publ. *Museo Italiano*, 1887) from Gortyn; 65, archaic female head with traces of color, from Phaistos; 21–35, vases in the geometric style; 116, colored male terracotta head; 119, fifty statuettes of oxen. Among metal objects are: a gold Nike found in a tomb at Knossos; a gold statuette of Eros; eight bronze hatchets; jewelry in gold and bronze from Phaistos; a bronze statuette of a warrior from the cave of Amarios.

KNOSSOS.—In a vineyard belonging to the ground of a Mohammedan mosque less than two miles distant from Herakleion has been discovered a great piece of poros stone containing a funeral inscription of ten lines, relating to one Thrasy machos, the son of Leontios, who fell in a cavalry engagement about which nothing definite is known. This Thrasy machos, to judge by the look of the lettering of the inscription, belonged to the second century B. C. In the ten verses of the metrical inscription occurs the new epithet *μεγαίχηλος*; still more interesting are two novel proper names, *Ἐπραιών* and *Ἐδαίον*. *Ἐπραιός* appears to be an ethnic name in Kreta which will have to be identified hereafter; but the genitive *Ἐδαίων*, which is accompanied by the epithet *ἡνεμόντος*, applies to a mountain with the nominative *Ἐδαίον* or *Ἐδαίων*.—*Athenæum*, June 2.

ITALY.

PREHISTORIC AND CLASSICAL ANTIQUITIES.

ANZIO=ANTIUM.—*Roman baths.*—In 1826, some excavations undertaken in the grounds of the present Villa Adele proved the existence of baths. Recent digging has uncovered a great part of the ruins. Behind the calida-

rium were found two large and fine marble busts with shoulders cut like hermae. One is of a middle-aged bearded man with short curly hair, and symmetrical, serious face—a good copy of the second century in excellent preservation. The second represents, perhaps, Ariadne, with abundant hair bound by a fillet and falling over her shoulders, four long locks being brought over her breast: it is a beautiful work of art, but an imitation.—*Not. d. Scavi*, 1888, pp. 234–35.

BERTINORO (prov. of Forlì).—*Pre-Roman tomb*.—Objects found in a tomb here, though not very numerous, are interesting for the mixture of Italic and Gallic elements.—*Bull. di Palet. Ital.*, 1888, Nos. 3–4.

BOLOGNA (and its neighborhood).—In Bologna, near *Porta d'Azeglio*, was found a Roman pavement, together with many architectural fragments: near Crespellano, a *terramara* has yielded a number of interesting objects: at *Ripe della Ghedarina*, near Imola, were found a large number of flints and rude stone utensils, besides fragments of vases like those found at Castellaccio; and it is probable that there exists here a prehistoric station or *terramara* similar to that in the latter locality.—*Not. d. Scavi*, 1888, pp. 174–78.

Excavations in the caves of Farneto.—Sig. Francesco Orsoni has again taken up, during the current year, the excavations in the caves of *Farneto*, where fruitful palethnological researches were made some years ago (cf. BRIZIO, *La grotta del Farnè*, 1882). These new systematic excavations are very important for the solution of the problem as to whether or no we are to consider as one and the same people the neolithic inhabitants of the caves and *fondi di capanne* and the family which during the bronze age formed the *terremare* in the valley of the Po. It is reported that this question is settled in the affirmative by these excavations.—*Bull. di Palet. Ital.*, 1888, Nos. 5–6.

Inscriptions.—Near the Castel San Pietro, have been found two stones with identical inscriptions, saying that the bridge over the Silarus was built by the Emperor Nerva.—*Athenæum*, Sept. 8.

CITTÀ DELLA PIEVE.—*Etruscan polychromic urn*.—Professor Milani publishes in the *Notizie degli Scavi* (1888, p. 219) an interesting paper (with a phototype) on an urn of alabaster which, though found about fifteen years ago, and in the Taccini collection, and mentioned by Dennis (*Cities and Cem.*, p. 376), has never been reproduced or adequately studied. It has been recently added to the Etruscan Museum in Firenze. The top of the urn is modelled like a mattress: on it reclines the husband leaning on a double pillow, the lower part of whose body is covered with a pallium bordered with a Greek mæander in red. He holds a patera in his right hand, and rests his left on the shoulder of his wife: the head, neck, and broad chest are carefully treated—the head being of a separate piece: the hair and eyes are painted black. The wife is seated, dressed in a chiton and an

ampechonon which covers her from head to foot: a gold necklace, found on the spot, adorned her neck. Both figures are strongly individual, and the strong and broad type of the man is especially characteristic. The coloring is in fresco applied directly to the alabaster, and not in tempera, like the famous sarcophagus of the Amazons. Its style accords with that of the painted tombs of Chiusi of the v and iv centuries B. C. The evident influence of Greek art, the modelling, and the drapery point to the middle of the v cent. as the real date of this important work, and, in Professor Milani's opinion, it is the oldest of the monuments of Chiusi, which he arranges chronologically as follows: (1) v-cent. urn of Città della Pieve; (2) v-iv-cent. urn of St. Petersburg; (3) iii-cent. cover of urn in Perugia; (4) iii-ii-cent. sarcophagus of *Larthia Seianti* in Firenze; (5) ii-cent. sarcophagus of *Larthia Thanunia Tlesnasa* at the British Museum.

CORNETO=TARQUINII.—Professor Helbig has reported the discovery of three interesting tombs at the place called *Villa Tarantola*, within the necropolis of Tarquinii. All have this peculiarity, that only the beginning of the vault is cut in the native rock, the top being covered with a large stone slab. After describing the objects of personal decoration in one of these tombs (cinerary urn, vases, etc.), Prof. H. goes on to remark: "This corridor-tomb is, without doubt, the most ancient of any yet discovered concerning which we have accurate information. Its contents, in fact, offer numerous points of contact with those of the earlier 'trench-tombs,' and in some cases even with those of the 'well-tombs.' To prove the first fact it is sufficient to institute a comparison with the 'tomb of the warrior,' which is the richest trench-tomb yet discovered. Both tombs have the fibula with bone-disks; the spiral *πρόκρυς*; the glass *vaghi*; the enamel scarab (Egyptian); and the flask of beaten bronze. On the other hand, this corridor-tomb is related to the well-tombs through the cinerary urn with double cone, and the flask and painted cup, which two latter types are now proved not to be confined to the well- and trench-tombs but also to the corridor-tombs." These correspondences add a new proof (in the opinion of Prof. H.) to the opinion that the necropolis of Tarquinii represents a continuous development from the earliest to the latest form of the tomb, and that the well-tombs should not be attributed to a different population from that to which we owe the later tombs. It is also interesting that in a corridor-tomb a cremated body should be found by the side of a buried body.—*Not. d. Scavi*, 1888, pp. 180-84.

CUMÆ.—*New Excavations*.—The excavations during this season have not produced nearly as important results as those chronicled in 1884 and 1885. Forty-one tombs of tufa were visited, also two of tiles, and one sepulchral chamber. The objects found in them were of minor importance, only a single figured vase having been found. There were some fifteen mirrors, a few fine glass *alabastra*, and well-preserved terracotta vases.—*Not. d. Scavi*, 1888, pp. 196-97.

ESTE.—*Antiquities discovered in the Fondo Baratela. II. Figured Antiquities.*—In continuation of the notice on p. 209 of the JOURNAL, the second part of Professor Ghirardini's memoir will be here analyzed. It treats of the *figured antiquities* divided into two classes—bronze statuettes and figured plaques. The art of both classes, with the exception of a few Graeco-Roman objects, is both rude and barbarous, and apparently Gallic in character. 1. *Statuettes*: the statuettes may be divided into four main classes; (a) nude male, (b) draped male, and (c) equestrian male, statuettes; (d) female statuettes. A fifth class includes the *ex-votos*, consisting of isolated members. In the statuettes there are examples in which there is but a rude attempt at the imitation of the human figure; while in others a certain progress is evident, and features, like the ears, are attempted. Among the draped male figures, those of warriors are the most interesting, and, in several, the details of the accoutrements are suggestive and corroborative of the Gallic character of these works. The most notable fact regarding the female statuettes is that their heads are always heavily veiled: this is, in fact, a distinctive mark of the sex, there being but little in the shape of the body to distinguish the women from the men. Among the Graeco-Roman statuettes, which differ completely in technique and style, are several of Minerva, two of bronze and two of silver. 2. *Figured plaques*: all these are of bronze, excepting a few of silver and one of gold. They are all worked with the hammer, and belong to the class called *σφυρίδατα*. They are, however, executed according to different technical processes. (a) Some are in *repoussé* work by *opus malleatum* (*ἐκκρούειν*); this is the more common process, by which the thin plates are placed on a pliable surface and the design is made by hammering a blunt instrument into their surface: by this process is obtained the geometric decoration of the bronze vases, helmets, shields, belts, and other objects belonging to the primitive Italic necropoli of the Villanova and Este types. In these Este plaques, the outlines of the figures are made more definite in certain cases by the addition of incised lines. (b) The second process is that of *intaglio* or *caelatura* or *toreutics*, as early and general as the former. Though generally used in solid objects of cast bronze, it is also applied to plaques, usually in a secondary manner. (c) Stamping was also in use, by which some plaques were impressed with figures in relief. (d) Open work, or *opus interrasile*: the figures executed by this process are worked up in detail by lines or points. The style of many of these plaques seems earlier than that of the statuettes. The figures on them are generally processions of warriors, either on foot or on horseback, carrying lance and Argolic shield, with their heads helmeted. In some cases we are reminded of similar figures on the *situlae* of North Italy. Female figures are quite frequent. Professor Ghirardini divided the plaques according to two systems: first that of sex; second that of technique.—*Not. d. Scavi*, 1888, pp. 71–127.

III. Ornaments and Utensils.—These numerous objects are of especial value as not only helping to date the entire collection, but as giving an insight into the manners and customs of the people. Professor Ghirardini divides them chronologically into three main groups, as they contain objects of an *early period*, i. e., the second and third of the periods given by Professor Prosdocimi to the necropoli of Este; or objects of an intermediary age, that called by Prosdocimi the *fourth period*; or, finally, objects of the *Roman period*. In the *first* group are found: (a) *bronzes*—including fibulae, only one of which is of the early period; batons; pendants; hair-pins; pins; armlets and rings: (b) *terracottas*—including Greek and native pottery and small objects. The *second* group contains among its bronzes many interesting fibulae, especially of the *La Tène* variety, which add several new shapes to those already known. To the *third* or Roman group belong especially a large series of terracottas.—*Not. d. Scavi*, 1888, p. 147-73.

IV. Coins.—Among the coins, of the VI-VIII cent. of Roma, are: (1) silver coins of the Massalia type with the inscr. *MAΣΣΑ* with the head of Diana and the lion—most of them being barbarous imitations in which sometimes a North-Etruscan inscription replaces the Greek; (2) Roman *Vittoriati* coins with Jupiter and the head of Victory with *ROMA*; (3) denarii, assi, and others of the late-Republican period; (4) bronze coins of Augustus with the names of triumvirs; (5) imperial coins of Augustus, Tiberius, etc., ending with Hadrian. The majority of the coins belong to the last three centuries B. C.—*Not. d. Scavi*, 1888, pp. 204-14.

NEMI.—*Temple of Diana.*—The excavations at this temple were renewed during the past season and led to the discovery of three *cellae*, beside that uncovered in 1885-87. These are far less rich, architecturally, and had been despoiled of their decoration. A few inscriptions, marble sculptures, terracottas, and coins came to light.—*Not. d. Scavi*, 1888, pp. 193-94.

MILANO.—*Prehistoric antiquities at Cascina Ranza.*—Outside of the Porta Ticinese, at Milano, at the *Cascina Ranza*, a group of bronze antiquities belonging to the bronze age came to light in a clay bed. Among those examined and described by Professor Castilfranco are, a sword, two large poniards with triangular blades, lance-heads, axe-heads, etc.—*Bull. di Palet. Ital.*, 1888, Nos. 5-6.

OSTIA.—*Excavations renewed.*—The excavations have been taken up again, in the zone between the square of the theatre and the so-called temple of Matidia. Up to the present, two groups of buildings have been recognized, the first of which belongs to baths, the second appeared to Professor Lanciani to be the *Statio Vigilum* or an *insula* or a *domus*, rented by the City Prefecture, in order to lodge the detachment of *vigili* on service in Ostia and Porto, furnished by the fourth cohort. The excavations promise to yield rich scientific and artistic results, as the site has not been

disturbed for the last four centuries and the buildings do not belong to the category of granaries.—*Not. d. Scavi*, 1888, pp. 233–34.

PALERMO.—*Gift to the Museum.*—The princess of Torrearsa, who owned the large and valuable collection of ancient vases formed by the well-known writer and archæologist, the duke of Serradifalco, has donated it to the Museum of Palermo.—*Cour. de l'Art*, 1888, No. 21.

POZZUOLI.—*Inscriptions.*—Three marble bases with important inscriptions have come to light. The second is an honorary inscription to C. Aelius Quirinus Domitianus Gaurus. The second is as follows: L·AVRELIO·AVG·LIB·|PYLADI·|PANTOMIMO·TEMPORIS·SVI·PRIMO·|HIERONICAE CORONATO·III·PATRONO|PARASITORVM·APOLLINIS SACERDOTI·|SYNHODI·HONORATO PVTEOLIS·D·D·|ORNAMENTIS·DECVRIONALIB·ET·|DVVMVIRALIB·AVGVRI·OB·AMOREM|ERGA PATRIAM·ET EXIMIAM·LIBERA|LITATEM·IN·EDENDO MVNER·GLADI|atorvm·venatione·passiva·ex·in|dulgentia·sacratissimi·princip·|COMMUDI·PII·FELICIS·AVG·|CENTVRIA·CORNELIA. This base was, then, dedicated to the pantomime *Pylades*, fifth in the series of actors of that name, who, together with the other pantomime *L. Aurelius Apolaustus*, flourished under M. Aurelius Antoninus and L. Aurelius Verus. The inscription shows that he lived into the reign of Commodus.—*Not. d. Scavi*, 1888, pp. 236–37; MOMMSEN in *Bull. Istituto arch. germ.*, 1888, 1.

RIPATRANSONE (near) (Marche).—*Find of prehistoric bronze poniards.*—Two lots of large bronze poniards with triangular blades had previously been found in Italy—one in the province of Parma, the other in that of Teramo. A third and larger series has just been found in the *contrada* called *Castellano*, near Ripatransone in the province of Ascoli Piceno. There were twenty-five poniards of two different types: they belong, according to Pigorini, to the bronze age.—*Bull. di Palet. Ital.*, 1888, Nos. 5–6.

ROMA.—*Discovery of a sacellum compitalis.*—On the cross-road at the meeting of the streets *San Martino ai Monti* and *Giovanni Lanza*, was unearthed a sacellum compitalis [small open-air chapel established at the cross-roads to the *Lares Compitales*] of the ancient Esquiline region. The monument, still almost entirely preserved, rises on a public area which retains its ancient pavement. It is composed of a large altar of travertine, before which is a wide *suggestum* or platform built of large rectangular masses of tufa. In the Augustan age it was covered with slabs of marble, and, while the earlier part was religiously preserved, between it and the altar a marble base was added on which a statue of Mercury was dedicated, as is shown by an inscription dated 744 u. c. = 10 B. C. Near this sanctuary rose the ancient temple of Juno Lucina, hence it is probable that it is on the site of a shrine of the Argives. Not far off were fragments of columns, friezes, and large marble cornices. A second inscription is a determination of the public area by Augustus.—*Not. d. Scavi*, 1888, pp. 224–25.

Archaic tombs.—Near the church of San Martino and on the piazza Vittorio Emanuele, have been opened a number of early tombs, or tufa coffins, which belong to the immense archaic necropolis of this region: all of them had been previously rifled. They contained the usual variety of objects: a vase of *bucchero laziale* with large body; fibulae; vases with graffiti; two feet of a bronze tripod; etc. One of these stone coffins must have had a rich and varied content, as there were many fragments of terracotta vases, some plain, others with colored decoration; pieces of *bucchero laziale*; handles of vases, ending in panther-heads; fragments of bronze objects; two small spirals of gold wire; four glass scarabs with Egyptian hieroglyphs.—*Not. d. Scavi*, 1887, pp. 534–35; 1888, pp. 59, 132.

SCULPTURES.—*Archaic Greek Bronzes on the Via Portuense.*—A most unusual discovery is reported by Professor Helbig in the *Not. d. Scavi*, 1888, pp. 229–32. He says: "In December of the past year, the market of Roma was literally inundated with cast-bronze archaic figurines representing standing youthful male figures of a type similar to that of the so-called Apollo of Tenea." Investigations showed that over a hundred had been found by some workmen outside of the Porta Portese. "The figurines, whose height varies from 7 to 8 centim., may be divided into two classes. The example of one class reproduces the archaic Greek type purely and without any addition:" their execution, though not detailed, expresses the main forms with the precision and energy characteristic of archaic Greek art of the VI cent., and must be the product of a Greek bronze-founder of that period. The type of the second class is in general the same, except that the heads of the figures are covered with a hemispherical cap; but the forms lack the precision of the former class, are soft and inaccurate: the explanation is that the former are imported works, the latter are imitations by Latin artists.

These figures are doubtless votive, and are not representations of any divinity. Professor Helbig considers that the cap placed on the figures of the second class is decisive of their votive character, for he sees in it the *pileus libertatis*, the sign of a free citizen, and that these statuettes were dedicated by Roman citizens. The figurines without *pileus* represent an early stage when the Romans were obliged to dedicate as symbolic portraits imported works; those with the *pileus* represent the later stage of home manufacture. Two ancient sanctuaries are known outside the Porta Portuensis, the *lucus Deae Diae* and the *fanum Fortis Fortunae*, and Helbig conjectures that they belonged to the former and were votive portraits of the Arval brothers.

High-relief of the Republican period.—In prolonging the Via Cavour, was found a slab of travertine bearing in the centre, in high relief, the bust of an old man, holding in his left hand a sheaf of wheat, and in his

right an indistinguishable object (basket or fruit?). Underneath is his name in letters of the Republican period: M·CAESENNI·SEX·F■■■■.

Statues in the Suburra.—In cutting the Via Cavour through the old Suburra, the following sculptures were found, near the church of S. Maria dei Monti: upper part of statue of Jupiter, $\frac{1}{2}$ life-size; statue of Aesculapius, of the type known by good replicas in Napoli (Clarac, No. 1161), in the Torlonia Museum (Visconti, No. 94), and in the *Braccio Nuovo* of the Vatican (Clarac, No. 1159); two good statues of Mercury, both headless; a good statue of Bacchus; a sleeping winged Cupid, life-size, lying on his chlamys spread on a rock, and resting his head on his left arm; this example is the most perfect known replica of the subject. These statues are all a little under life-size, unless otherwise specified.

Via San Basilio.—A headless statue was found here, representing, apparently, an Egyptian priest.

Church of S. Bonosa.—In demolishing the church was found a basrelief, in Greek style, of *Apollon Kitharoidos*, broken above. The figure is nude, with chlamys thrown over the left shoulder, and rests on the lyre which is placed on a pilaster.

Vigna Palomba, outside Porta Pia.—The following objects came to light: a life-size seated female figure, dressed in chiton and with a mantle falling over her left shoulder; the headdress is of the time of the Antonines: Hercules strangling the Nemean lion, a basrelief of the well-known type: a youthful athletic head, perhaps of Mercury: several antefixae of sarcophagi: two headless busts.—*Bull. d. Comm. Arch.*, 1888, May.

The Tiber.—In the bed of the Tiber, near the Marmorata, was found a statuette of a youthful Bacchus crowned with ivy, of delicate workmanship.—*Moniteur de Rome*, July 6.

Sarcophagi.—In the Vigna Vagnolini on the Via Appia have been found some sarcophagi belonging to the close of the second or the beginning of the third century A. D. On one are two scenes from the legend of Meleager.—*Bull. Istituto arch. germ.*, 1888, p. 97.

INSCRIPTIONS.—An inscription recently noticed in the pavement encircling the Church of San Vitale completes another found during the last century, now in the Vatican. It belongs to the group of inscriptions erected in their camps by the praetorians in honor of their national divinities. This one is to Aesculapius, was erected by Thracians, and is dated 241 A. D.—*Bull. d. Comm. arch.*, 1888, April.

VANDALISM.—*The preservation of the Aelian bridge and the Mausoleum of Hadrian.*—The plans for the new embankments of the Tiber involved damage to the Aelian bridge (*Ponte Sant' Angelo*) and the Mausoleum of Hadrian. The Archæological Commission is making a special effort to avert this piece of vandalism. Lanciani remarks: "As there have already

been destroyed during the last few years, either in their entirety or what remained of them, four of the ancient bridges, the Vaticanus, the Cestius, the Aemilius and the Sublicius, and two others, the Valentinianus and the Fabricius, have been partly disfigured, the Archæological Commission does not feel that it can be taxed with over-zealousness if it insists on the absolute and perfect preservation of the only bridge that now remains." The Aelian bridge was finished in 134 A. D., and seems to have remained entire up to the catastrophe of 1450. It was restored under Nicholas V by Rossellino, decorated by Clement VII in 1527, and reduced to its present form by Bernini in 1668 under Clement IX. Through all this it has preserved its original grandiose aspect. In regard to the Mausoleum of Hadrian, it is feared that a part of the basement is to be broken away, to the grave peril of the entire construction.—*Bull. d. Comm. arch.*, 1888, April.

Palace in the Via del Consolato.—A palace at No. 4 Via del Consolato, whose atrium was, according to tradition, designed by Raphael, has been destroyed after photographs of it had been taken.—*Ibid.*

Church of Santa Bonosa.—This little Trasteverine church has been pulled down. It was of very early foundation, as an inscription of the close of the fifth cent. mentions it as a *locus sanctus*. In its ruins were found many fragments of sculpture and inscriptions: among the latter, some are pagan, but the larger number are Christian.

"Torre dei Cenci."—The XVI-century building on the corner of the Via della Stufa and the Via della Mortella, commonly called *la torre dei Cenci*, has been demolished.—*Ibid.*, May, June.

SORRENTO.—*Prehistoric objects in the Grotta Nicolucci.*—In this grotto, near Sorrento, the ground was found to be full of fragments of terracotta vases, of which only five were entire. Almost all are hand-made, though some are turned. The decoration is either scratched (*graffito*) or in relief, the latter consisting of lines, sometimes simple sometimes double, variously combined and of various shapes; while in the former the lines are straight and combined into squares, mæanders, etc. A great quantity of worked stones and bones were also found. The presence of a single bronze object would remove the find from the stone to the first metal age.—*Bull. di Palet. Ital.*, 1888, Nos. 5-6.

SYBARIS (territory of).—*Excavation of the necropolis of Torre Mordillo.*—The Ministry of Public Instruction, wishing to renew the excavations undertaken in 1879 and 1880 by Signor Cavallari in search of the ancient Sybaris, confided the task to Professor Viola. In November, the new attempts were carried on through the entire region called *Pattursi*, from the left bank of the Crati to the foot of the heights of Serra Pollinara, near where it joins the torrent *Coscile*, on the site described by Diodoros and Strabo. These researches were entirely without result. About twelve kilom.

to the west is a tableland called *Torre del Mordillo*. Here, on March 14, was discovered a vast necropolis of purely Italic character, in which 48 tombs were explored between March 14 and April 2.

Professor Pigorini makes the following remarks on this discovery. The necropolis is not Greek but Italic, and is closely related to the neighboring ones of Suessula and Piedimonte d'Alife. He starts with the statement that the Italic tribes made their first appearance in the valley of the Po, and slowly advanced southward progressing in the meantime in culture, arts, and industries, either by natural development, or the influence of other civilizations, and that to these stages different and successive archaeological strata correspond. They practised cremation exclusively in the valley of the Po, and even after they passed the Apennines and reached Tarquinii and the Alban Hills: but cremation was superseded by inhumation at Roma before Servius and in all the necropoli to the south. In the tombs of *S. Martino ai Monti* and the early ones of Suessula and Piedimonte d'Alife, the skeleton lies in a pit surrounded and covered by pieces of tufa or *cappellaccio*: this is also the case here at *Torre del Mordillo*. The necropoli of Suessula and *S. Martino ai Monti* are dated in the second and third quarters of the VIII century B. C., and that near Sybaris must be later, as is shown by the character of the contents of the tombs. Professor Pigorini supports this opinion by arguments derived from the material, shape, and character of the swords, razors, *paalstabs* and hatchets, *fibulae*, and crockery, and from the prevalence of iron over bronze—a late characteristic. He considers the date of the necropolis to be within the fifty years preceding the fall of Sybaris (560–510). The poverty of the tombs indicates that they belonged to poor people.

From a study of Professor A. Pasqui's careful catalogue of the contents of the 48 tombs, the analogies appear to be to modified Villanova types, and to the necropoli of Vetulonia, Tarquinii and Terni. Professor Pigorini omits to signalize the interest of a small group in cast bronze, of which three examples were found: it consists of two nude male figures standing side by side, each with one arm around the other's neck and hanging over his shoulder, the other falling down by his side: though of very rude workmanship, this group—the only example of figured art in the entire necropolis—reminds at once of two well-known examples of archaic Greek sculpture, two groups of male figures in the same position, attributed to the early Boiotian School.—*Not. d. Scavi*, 1888, pp. 239–68.

In a letter published in the *N. Y. Nation* of June 21, Mr. W. J. STILLMAN discusses these discoveries, as throwing "light on the pre-Etruscan civilization of the peninsula," and showing that this "was the cemetery of a race which had not yet felt the influence of the Hellenic civilization; and, as at best the site can only have been ten miles or so from Sybaris, it seems impossible

that it should not have been anterior to the arrival of the Greeks. I say seems so, for Pigorini, who is an eminent authority, holds that the remains are those of an Italic tribe which drifted down into contact with the Greeks after the advent of the latter; but, as he gives no reason for his opinion, and as the entire absence of traces of Greek art in the objects found is an excellent reason for the contrary, I consider his opinion outweighed by that of Fiorelli . . . Gamurrini . . . and Barnabei, all of whom hold no doubt as to the pre-Hellenic date of the material discovered in the necropolis of the Sybarite district. But the importance of the attribution of these objects will appear only when we learn that they are identical with the earliest art found in Vetulonia, Civita Castellana (the antique Falerii), and the most archaic tombs of Corneto (Tarquinia) as well as, in certain details, with the finds in the lacustrine deposits of the northern provinces of Italy. Especially the finding in all these named localities of the cinerary urns of the hut type, whose discovery on the top of the Alban mountain under two strata of volcanic deposits had long been considered the earliest evidence of Italian civilization, must be considered evidence of a common Italic civilization distinct from the Etruscan. The occurrence of these evidences of it in a district like that of the Basilicata, where the Etruscans never went, proves its independence of them, while its priority in development to the remains recognizable as Etruscan in locations like Falerii, Tarquinia, and Vetulonia proves its widespread existence prior to any distinctly Etruscan domination, and, I believe, prior to the Etruscan colonization.

"Great weight must be accorded to the opinion of Helbig, who maintains distinctly that all this early art is early Etruscan, and that the well-tombs which at Tarquinia disclose the hut-urns in perfection are but an earlier form of Etruscan burial—in other words, that early Etruscan and archaic Italic are identical. Helbig's opinions are those of a profound student and master in this province, and must be met, if rejected, by grave objections. Fiorelli, however, finds them untenable, as do the Italian archæologists with whom I have personal acquaintance, and the Sybarite tombs are of the most serious importance in this controversy. Fiorelli maintains the existence of a primitive Italic civilization anterior to the Etruscan, and holds the community of these products of an archaic art from such widely separated localities as proof of it. Gamurrini goes further, and would identify it with the Pelasgic civilization to which so many traditions testify. And Castellani, in his discussion (informed by a most intimate technical knowledge of his art) of the early goldwork of Italy, shows that the most beautiful and characteristic art in this branch comes from places where there is no question that the Etruscans never had a footing."

Too!.—We take pleasure in calling attention to the reversal, by the higher court, of the judgment against the excavator, here, published in vol.

III, p. 480. W. MERCER, in the *Academy* of June 9, says: "After the elapse of a year, the judgment has been reversed on appeal; and the tribunal, again sitting at Perugia, after a long discussion ending on May 26, has ordered the restitution to the finders of the whole of the objects seized, together with a remission of the fine, and payment of all expenses. The Italian Government, however, retains its usual right of purchase under the Pacca law, before the proprietors can dispose of their property to other buyers."

VERONA.—*Roman coins*.—An important numismatic discovery was made at Verona (Feb. 1887), not far from San Zeno. An amphora was found full of silver *denarii*, in great part fresh from the mint, belonging to the various emperors between Nero and Lucius Verus. Among them were two beautiful and perfectly fresh gold *denarii*, one of Faustina Senior with *Aeternitas* on the reverse, and the other of Antoninus Pius with the head of the youthful Marcus Aurelius on the reverse. The total number of coins exceeds 2800. Among the inedita are: one, each, of Sabina, Aelian, Marcus Aurelius, and Lucius Verus. The latest date is 168 A. D. for a coin of Marcus Aurelius, and this indicates the date of the hiding of this treasure to be probably c. 170.—*Rivista Ital. di Numismatica*, 1888, pp. 229–38.

SICILY.—GELA.—*Gold Jewelry*.—At Caposoprano (*Terranova di Sicilia*), where the necropolis of Gela is located, some tombs have been discovered, in one of which were found many objects in gold belonging to a female wardrobe, and including, (1) a necklace formed of cylinders, and having rosettes and a female head in the centre; (2) a long chain ending in two lion-heads; (3) a gold spiral with two heads; (4) ten gold button-covers (*brattae*) with a female figure seated on a large bird with outspread wings (*cf.* Camarina coin, POOLE, *Cat. of Gr. Coins, Sicily*, p. 37, n. 16, 17); (5) two rings, two earrings, and many tubes and gold grains: also, 82 coins, two of gold and the rest of bronze, almost all of Agathokles (317–289 B. C.). This date agrees with the artistic quality of the jewelry, which recalls the gold-work of Pantikapaion, and the best of the ornaments found in Etruscan tombs of the third cent. B. C. (*cf.* *Mus. Greg.*, t. CXVI, sq.).—*Not. d. Scavi*, 1888, pp. 200–1.

GIRGENTI=AGRIGENTUM=AKRAGAS.—In the harbor of Girgenti, a dredge-boat recently came across a very rich find of ancient coins and antiquities, including a quantity of plate and numerous Greek statuettes.—*Drake's Magazine in Amer. Architect.*, Aug. 4.

CHRISTIAN ANTIQUITIES OF ITALY.

MANTOVA.—*The Medallist "l'Antico"*.—The medallist Pier Jacopo Alari-Bonacolsi, called *l'Antico*, who flourished at the court of Mantova at the close of the xv cent., is made better known by a paper published by U.

Rossi in the *Rivista Italiana di Numismatica*, 1888, No. 2. Born c. 1460, in 1499 he had been some time married and had a family. His earliest and best-known works, the medals of Gian Francesco Gonzaga and Antonia del Balzo, his wife, are attributed to c. 1480. A number of documents that throw light upon his life are published. His early work was at Bozzolo. He went to Mantova in 1496, but did not remain there long. From Bozzolo he removed with the Court to Gazzuolo. It is interesting to note that many of his works were bronze statues and reliefs exactly imitated from the antique. He also worked in marble. He was esteemed a good connoisseur of antiques, and was employed to restore works of ancient sculpture. After a quiet life at Gazzuolo he died in 1528.

ROMA.—*Early Portraits of SS. Peter and Paul.*—The *Cronachetta mensile di Archeologia* publishes a series of notices on the discoveries of Christian archaeology in Rome, especially in the Catacombs of Sant' Agnese. Of especial interest is a metal plate on which are the busts of the apostles Peter and Paul, represented according to the traditional type of the first centuries: St. Peter with short curly hair and short beard; St. Paul with a more strongly-marked face, bald head and long beard.

Just above Sant' Agnese, has been found the fragment of a sepulchral inscription of the fourth century, belonging to the family of the Flavii. This is interesting as confirming the opinion that the church of Santa Costanza served as a mausoleum to the imperial Flavian family.—*Moniteur de Rome*, July 8.

SPAIN.

SEVILLA.—*Accident to the Cathedral.*—August 2, one of the piers of the cathedral gave way, causing a portion of the roof of the nave to fall, destroying the organ and doing other damage to the cathedral. It is said that not less than \$500,000 will be needed for the repairs; part of which sum will be raised by a national subscription.—*Amer. Architect*, Aug. 18.

FRANCE.

CONGRESSES.—The *Congrès Archéologique de France* has just held its fifty-fifth congress (June 12-20) under the auspices of the *Société Française d'Archéologie*. It was held at Dax and at Bayonne, and included an excursion to San-Sebastian, Tolosa and Pamplona. As usual, the program of the meetings was devoted to a study of the region visited, that is, the departments of the Landes and Lower Pyrenees: it included, a general review of previous work done in this field; an account of its prehistoric monuments of the peoples who inhabited the country before the Romans; of the Iberians; the Boii; the Gauls and their remains; the Romans and their remains; the

local divinities and the monuments concerning them; the early-Christian, Merovingian and Visigothic monuments; the Mediæval monuments of religious architecture; the châteaux; the industrial arts; the hospitals; tombs; coins and medals; manners, customs and traditions.

During the summer the several annual congresses met in Paris.

The Congress of the Sociétés des Beaux-Arts was composed of more than 300 societies, who sent delegates to its meetings held May 22-25.

THE PRESERVATION OF MONUMENTS.—I. *Congress*.—At its first sitting, held July 23, the committee of organization of the International Congress for the protection of works of art and of monuments appointed, as president, M. CHARLES GARNIER; as vice-presidents, MM. BOESWILLWALD, inspector of historic monuments, and VITU, vice-president of the Society of the "Amis des Monuments;" as secretary, M. CHARLES NORMAND, director of the review *L'Ami des monuments*.

II. *Regulations*.—A law of March 30, 1887, gave to the State the necessary powers for the preservation of ancient monuments belonging to the communes, to public institutions and to private individuals. The Council of State has lately elaborated the regulation of public administration which determines the details of its application. The classification of the monuments is to be made by decree of the ministry of Fine Arts, on the advice of the commission of historic monuments, at the request or with the permission of the owner, and within a limit of six months: while awaiting this decision, the monuments concerning which a proposal is made cannot be destroyed or restored without the consent of the minister, except after a space of three months had elapsed from the date of the notification to the proprietor. The classification of a piece of property does not necessarily imply the participation of the State in any work of restoration or conservation, but all projects concerning such work must be communicated to it. These dispositions relate to monuments having a national, historical, or artistic importance. A simple decree will regulate the composition of the commission of historic monuments and the mode of nomination of its members.—*Cour. de l'Art*, 1888, No. 33.

GALLO-ROMAN FIGURINES WITH INSCRIPTIONS.—A figurine of Venus found at Fégréac bears the inscription *Rextugenos Sullias avot*: similar figurines were found at Caudebec, Angers, and other places (cf. *Revue Arch.*, 1888, I, p. 145). M. de Villefosse considers the word *avot* or *avot* to be the Gallic equivalent of *fecit*.—*Bull. Mon.*, March-April, 1888, p. 212.

BÉZIERS.—*Christian sarcophagus*.—Near Béziers, in the foundations of an ancient ruined chapel, has been found part of a Christian sarcophagus with bas-reliefs representing Christ before Pilate, and two miracles: an *orante* was placed in the centre. The work is of the fourth century, and probably of the school of Arles.—*Bull. Istituto arch. germ.*, 1888, p. 93.

LOUDUN.—*Discovery of an early painting.*—M. PALUSTRE has discovered and cleaned, in the *Église du Martroy*, at Loudun, an early painting on wood, representing the Virgin, considered to be one of the most admirable works of French painting of the xv century. It is thought to have belonged to the collection of King René and to be due to the brush of Nicholas Froment. M. Palustre is soon to publish it in the *Gazette des Beaux-Arts*.—*Cour. de l'Art*, 1888, No. 33; *L'Ami des Monuments*, 1888, No. 7, pp. 147-48; *Revue de l'Art Chrétien*, 1888, p. 404.

LUÇON (Vendée).—*Ruins of a Church.*—The ruins of a very early church, Saint-Mathurin, have been unearthed. Among the objects found are three statues, coins, tombstones and architectural fragments.—*L'Ami des monuments*, 1888, No. 6.

NARBONNE.—*Lex concilii Narbonensis.*—M. MISPOULET, at the *Académie des Inscriptions* (May 4), read a study on the bronze tablet recently discovered at Narbonne (p. 215). He thus sums up the conclusions resulting from his work. 1. The text inscribed on this tablet is a *lex publica*; it is a *lex data*, that is, emanating from the emperor without the aid of the comitia; it is the *lex concilii provinciae Narbonensis*. 2. The functions and the attributions of the *flamen provinciae* were modelled on those of the *flamen dialis* of Rome. 3. The prerogatives accorded to the flamen on leaving office belonged to him by full right, without special nomination or delegation: among these prerogatives figures a right the mention of which is here met with for the first time, the *jus signandi*.—*Revue Critique*, 1888, No. 20.

PARIS.—*Discovery of a Gothic monastic church.*—In digging for the foundations of a house on the corner of the Boul. St. Germain and the Rue des Bernardins, there were found the remains of an early church that was attached to the convent of Bernardine monks. There are some Gothic windows of great elegance and the lower part of some columns (or piers).—*Cour de l'Art*, 1888, No. 33.

SITTINGS OF THE ACADEMY OF INSCRIPTIONS.—The following are summaries of some of the papers recently read before the *Académie des Inscriptions et Belles-Lettres* (sittings of July 13 and Aug. 3).—M. ARBOIS DE JUBAINVILLE sought to prove that in Ireland, at a time intermediate between the archaic period (when the price of sales was in female slaves and in cattle) and the time of the introduction of coined money, certain objects of jewelry, like bracelets, made of an exact weight, were used as a money value. This view he supported from an Irish ms. of the ix cent. which contains the record of a sale, and also from a massive gold bracelet weighing 1,000 gold frs. in the Museum of St. Germain.—M. BAILLET spoke on the Ethiopian people called the Blemyes (Βλέμυες), on the borders of Upper Egypt from which there have come to the Museum of Bûlâq a number of

documents relating to them. These documents are drawn up in Greek, and seem to belong to the VI cent. A. D. The main facts disclosed by them are the survival of the Blemyeen monarchy beyond the time when it was thought to have disappeared, the diffusion of Greek influence by these Ethiopians, and their conversion to Christianity.—M. TH. REINACH treated of *Athenian numismatics* with respect to the names of the *strategoi* read on coins. He sought to prove that the name of magistrates inscribed on the new style Athenian coins of the last centuries B. C., do not designate either archons or mint-officers, but the first two Strategoi of the Republic, its real heads at that time.—M. D. LE ROULS has discovered two bulls of Pope Calixtus II (1143), thought to have been lost, which certify to the transmission of the primitive hospital of the Teutonic order to that of the Knights of St. John.—M. BRÉAL presented a study on the letters of some inscriptions dating from the VII cent. B. C. He believes that the transition from syllabic to alphabetic writing was not a sudden one, and that between these two conditions there must have existed a form regarding which no clear opinion has yet been formed. Thus, the letter H sometimes appears with the value of an *h* as in *Hiepos*, sometimes with the value of an *η*. In very ancient inscriptions this letter must have corresponded to *hē*, and it is a mistake to think that the stone-cutter mistook *η* for *ε*.—M. BERGER presented a leaden roundel discovered in a Roman tomb in Africa, covered with various kinds of characters, some being Roman, and others very like Phoenician. It proves the use in Africa of maledictions after death, but the letters are so confused it is impossible to decipher them.—M. HOLLEAUX gave a translation of a Greek inscription found by him at Kibyra in Lydia. This inscription dates between 41 and 54 A. D., and states that Quintus Veranius was sent to Kibyra to oversee the works undertaken by order of the Emperor Claudius.—Paris *Temps*, July 17, Aug. 5.

LOUVRE.—*Susa Antiquities*.—The Salle Dieulafoy at the Louvre was opened on June 13 by the President of the Republic. The gallery contains the most valuable portions of the antiquities discovered at Susa by M. and Madame Dieulafoy. The brilliantly colored pictures of the Guard of Darius and the frieze of lions from the royal palace at Susa, unparalleled examples of painting in enamel, are adequately displayed on the walls of the gallery, where the vitrines are filled with antique bronzes, ceramics, cylinders, and precious objects of many kinds.—*Athenæum*, June 9.

Cf. description of the objects by HENRY WALLIS in the *Athenæum*, June 16, July 14; and *JOURNAL*, II, pp. 53–60, III, 87–93.

Copy of the Diadoumenos of Polykleitos.—M. RAVAISSON exhibited to the *Acad. des Inscriptions* (June 22) the cast of a beautiful marble head in the museum of the Louvre, which hitherto has wrongly been considered to be a Ptolemy. It is, in reality, he said, the finest known copy of the head of

the Diadoumenos of Polykleitos. A reproduction in marble of the torso of the same statue is also in the Louvre.—*Revue Critique*, 1888, No. 27.

PONTFAVERGER (Marne).—*Roman Treasure*.—A Roman amphora, weighing 45 kilog. and containing a treasure consisting of bronze coins and medals, has just been discovered here. The medals bear the effigies of Crispus, Probus, Licinius, Maximinus Hercules, and Constantinus I.—*Cour. de l'Art*, 1888, No. 37.

PONTIVY (near).—*Gallie Cemetery*.—M. Le Brigant, director and founder of the museum of Pontivy (Morbihan) has just discovered, on the road between that town and Persquen, a large Gallic cemetery containing over forty tombs.—*L'Ami des Mon.*, 1888, No. 7, p. 146.

RIEUX.—*A Gallo-Roman Temple*.—The *Société Polymathique* of the Morbihan has discovered at Rieux, between Vannes and Redon, a most curious Gallo-Roman temple. The cella has been already uncovered and a cemented area enclosed by a well-preserved wall brought to light.—M. Bonnemere in *L'Ami des Mon.*, 1888, No. 7, p. 146.

SAINT-MAIXENT.—Among recent discoveries, noted at length in the *Revue Poitevine*, are some mediaeval sarcophagi, sepulchral inscriptions, a denarius of Melle, etc.—*L'Ami des Mon.*, 1888, No. 7, p. 147.

TAVAUZ (Jura).—*A Gallic Stele*.—In a paper published in the *Bulletin Monumental* (March-Apr., 1888), M. Thédenat describes an interesting calcareous stele lately found at Tavaux. It represents a woman seen front-face; below is the inscription *D. M. Senobena*. The figure holds in her right hand a cup, while a *mappula* hangs over her left. With the exception of a painting of the v cent. in the catacombs of Syracuse, it is the earliest known representation of the *mappula*.

SWITZERLAND.

NATIONAL MUSEUM.—The decision to erect a "National Museum of Switzerland" is likely to call forth a lively competition among several of the principal Swiss towns. Bâle has offered for a site its Franciscan church, and is ready to contribute its collection of mediaeval antiquities. The towns of Berne and Lucerne are also expected to make offers, and a movement to the same effect has just sprung up at Zurich.—*Athenæum*, June 9.

BELGIUM.

BRUSSELS.—*Retrospective Exhibition*.—The Retrospective Exhibition, organized at Brussels by the Ministry of Agriculture, Industry and Public Works, was opened on June 7. It includes the following classes: Belgo-Frankish epoch; Frankish epoch; religious and civil metal and enamel work; jewels, watches and miniatures; medals; objects in copper, tin and

iron; arms and armor; objects in ivory; in marble, alabaster and carved woods; tapestries and embroideries; sacerdotal vestments and civil costumes; illuminated manuscripts; *etc.* Works in metal predominated, and never has there been such an exhibit of Christian metal-sculpture of the mediaeval period, both in the branch of *dinanderie* (so called from the city of Dinand) and of *orfèvrerie*. A large number of important inedited works were exhibited.—*Revue de l'Art Chrétien*, 1888, pp. 303-6.

GERMANY.

BERLIN.—*International Congress of Americanists.*—We have received the circular and program of the seventh biennial session of the *Congrès international des Américanistes*, to be held in Berlin, October 2-5 (Secretary, Dr. Hellmann, Königgrützer str. 120, Berlin, S.W.) under the presidency of Dr. Reiss. The last congress was held at Turin, in 1886. The first day of this year's congress will be devoted to the history of the discovery of the New World, to the history of pre-Columbian America, and to American geology; the second to Archæology; the third to Anthropology and Ethnology; and the fourth to Linguistics and Paleography. The questions enumerated under the section *Archæology* are as follows: (9) Can the architecture and the products of certain industries, especially the jade implements and pottery, of pre-Columbian America serve as a proof of a direct communication between the old and the new world?—(10) Antiquities of the state of Vera-Cruz (Mexico) (reporter, M. Strebel).—(11) Are the antiquities recently found at Costa Rica the products of a prehistoric people which no longer existed at the time of the conquest? (reporters, M. Polakowsky and M. Peralta).—(12) Religious and emblematic value of the different types of idols, statuettes, and figures which are found in the Peruvian tombs; classification of the *canopas* by types.—(13) The use of moulds in the manufacture of potteries in Mexico and Peru (reporter, M. Reiss).—(14) The manufacture and ornamentation of tissues in pre-Columbian America (reporter, M. Stübel).—(15) The classification by ages of the architectural monuments of Peru.—(16) The kitchen-midden (*sambaquis*) of Brazil (reporter, M. G. H. Müller).

The range of the subjects treated seems remarkably comprehensive and well-ordered. Any person who sends \$2.50 to the treasurer (Consul-General W. Schönlanck, Köpnickstr. 71, Berlin, S. O.) with a request, will be made a member, and all the publications of the congress will be sent him.

KÖLN.—*Restoration of St. Ursula.*—The restoration of the choir of the church of St. Ursula has led to some interesting discoveries, which are recorded in recent numbers of the *Zeitschrift für Christliche Kunst*, 1888, Nos. 2, 3, ff.

AUSTRIA-HUNGARY.

DALMATIA.—*A buried city.*—An Austrian Pompeii has been unearthed near Zara, the capital of Dalmatia. They found thousands of coins, works of Greek and Roman sculpture; Byzantine architecture, amphitheatres, temples, catacombs, etc.—*Amer. Architect*, Sept. 29.

DEUTSCH-ALTENBURG=CARNUNTUM.—*A Roman Amphitheatre.*—Professor HAUSER, while engaged in superintending the excavation of the Roman station of Carnuntum, on the Danube, near Vienna, has discovered in a cornfield the site of an amphitheatre, which is apparently in a good state of preservation. It is proposed to completely uncover it.—*Academy*, Aug. 18; *Moniteur de Rome*, Aug. 12.

ISTRIA.—*Excavations.*—The *Società Istriana di archeologia e storia patria* has continued its exploration of the archaic necropoli of that region. The results during 1887 were not of much importance: however, some antiquities belonging to the first iron age were found in the necropoli of the *castellieri dei Pizzughi*: some of the ossuaries were given to the Museum of Parenzo.—*Bull. di Palet. Ital.*, 1888, Nos. 5-6.

TURKEY.

CONSTANTINOPLE.—*The Museum of Antiquities.*—The correspondent of the N. Y. *Tribune* writes from *Constantinople*, March 30: "The great boxes containing the sarcophagi found at Sidon last year lie in the open air, closed to the eyes of visitors. Eight or nine months have passed since these treasures were brought to this city, and since the foundations were laid of the new hall intended to receive them: but the new hall has not risen above its foundations. Meantime, scholars are impatiently waiting for a sight of the marbles. Near the boxes from Sidon, on a pile of garden rubbish, is a sarcophagus newly brought from Macedonia, which is of fine marble and is very finely ornamented on its two faces."

RUSSIA.

SARATOF (near).—*Ancient City.*—There have recently been discovered on the right bank of the Volga, in the environs of Saratof, over an extent of 2½ versts in length and about one verst in width, vestiges of a large ancient city having all the indications of a superior culture (sculptured marbles, aqueducts, etc.).

STAROGORODKI (govt. of Tchernigof).—A peasant named Levotchko has discovered, at this village, a treasure valued at seventeen millions of rubles. The grounds of Levotchko are situated on the ancient property of Prince Ostersky. At the time of the invasion of the Tartars, the property of the

prince was devastated, and it was then that the treasure in question must have been buried: according to his own account, Levotchko has spent ten years in uncovering it. Besides a great quantity of precious objects and manuscripts, Levotchko says he has found ten barrels filled with very ancient fine-gold coins.—*Cour. de l'Art*, 1888, No. 37.

GREAT BRITAIN.

PRESERVATION OF ANCIENT MONUMENTS.—An order in council has just been issued prescribing that the following shall be deemed to be "ancient monuments" within the meaning of the Act of 1882: (1) The Nine Stones, Winterbourne Abbas, near Dorchester; (2) the Chambered Long Barrow, known as the Gray Mare and Colts, near Gorwell, in the county of Dorset; (3) the Stone Circle on Tenant Hill, Kingston Russell Farm, near Dorchester; (4) the Cup-marked Rock at Drumtroddan Farm, Mochrum; (5) the Three Standing Stones, Mochrum; (6) the Moat-hill of Druchtag, Mochrum; (7) the semicircular earthwork on the sea cliff, Barsalloch, Mochrum; and (8) the ancient Chapel at the Isle of Whithorn. The last five monuments are in the county of Wigtown.—*Academy*, June 2.

ENGLAND.—CHRISTCHURCH.—*Vandalism.*—It is reported that the town council of Christchurch, Hants, have resolved to pull down the remains of the Norman domestic buildings existing near the Castle-keep, and have obtained the permission of Lord Malmsbury and Sir George Meyrick for this "improvement" in order "to open up the view of the Minster." The ruin, now overgrown with ivy, is one of few examples remaining in this country of the domestic architecture of the period; and the beautiful round chimney may be called unique.—*Academy*, June 2.

LITTLE CHESTER (Derby).—A recent and somewhat extensive find of Romano-British pottery includes a noteworthy rim of a mortarium or mortar. Its color is the almost invariable dirty-cream of these culinary vessels, but the largely marked maker's name, *Vivius*, is colored in chocolate, painted before firing. No instance of a colored maker's mark has hitherto, we believe, been noted; at all events there is no instance among the mortaria and other large Roman vessels at the British Museum, or in the splendid collection of pottery of that period at York.—*Athenæum*, Sept. 22.

LONDON.—BRITISH MUSEUM.—*Fayûm Mummies.*—Mr. H. Martyn Kennard has presented to the British Museum two of the interesting mummies which were dug up in the Fayûm by Mr. Petrie (see pp. 337-38). The larger, that of Artemidoros, has a very fine painted portrait of the deceased wearing a garland, and is decorated with three scenes in gold upon a red ground and a gilt inscription Ἀρτεμίδωρος εὐψύχι. The smaller, that of a

child, is also exceedingly interesting.—*Athenæum*, Aug. 11; *Class. Review*, Oct. 1888.

Catalogue of Engraved Gems.—The trustees of the British Museum have published an illustrated catalogue of the engraved gems in the national collection, edited by Mr. A. S. Murray, keeper of the department of Greek and Roman antiquities.—*Academy*, Aug. 18.

NEW MUSEUM.—A Biblical Museum has recently been formed at the offices of the Sunday School Institute, in Serjeants' Inn, Fleet street, which is open, free to the public, every day. Among the principal contents are casts of Assyrian basreliefs in the British Museum, of the Rosetta and Moabite stones, and of the Siloam inscription; models of ancient Jerusalem, of Herod's temple, and of ancient Athens; a series of coins illustrating the history of the Jews; antiquities from Babylonia and Egypt, including several presented by the Egypt Exploration Fund; and, lastly, modern objects illustrating the ancient mode of life and the modern religious customs of the Jews. The honorary curator of the museum is the Rev. J. G. Kitchin, who will be glad to receive any help towards the collection either in money or in kind.—*Academy*, July 7.

OXFORD.—*Bodleian Library*.—The Homer papyrus recently discovered by Mr. Petrie at the Fayûm has been presented to the Bodleian Library by Mr. Jesse Haworth.—*Academy*, Sept. 8.

AMERICA. UNITED STATES.

ARIZONA.—*Ancient Cities*.—Mr. FRANK H. CUSHING has explored the wide valley or plain at the confluence of the Salt and Gila rivers in South-western Arizona. To-day railroads cross this valley, and much of it has been reclaimed, by irrigation, from the desert condition into which it relapsed when the ancient inhabitants disappeared: still a wide expanse of the plain, forty-five miles across, remains a desert. On this wide plain are many groups of mounds, in excavating which Mr. Cushing has discovered a number of ancient cities, to some of which he has given the names *Los Muertos*, *Los Hornos*, *Los Guanacas*, *Los Pueblitas*, *Los Acequias*, etc.

Los Muertos, "the city of the dead," has been traced for three or four miles, and forty or fifty huge structures or communal houses have been examined. These houses are 300 or 400 feet long and 200 feet wide, possibly larger. They were generally built of adobe bricks, sun-dried, without straw or admixture of cement of any kind. In some instances, Mr. Cushing thinks, they were four or five stories high; but this can only be conjectured from the size of the mounds, the thickness of the walls, and

the quantity of the *débris*. Between forty and fifty of the large, or communal, houses were found in *Los Muertos*. In the centre was a structure larger than the others, which Mr. Cushing calls a temple. In this building (which was enclosed by a strong adobe wall), and in no other, were bodies found deposited in an upper story. Here there were four or five adobe sarcophagi, two of which were placed nearer the centre of the building than the others, were more conspicuous, and contained what appeared from the skeletons to be the remains of men of advanced age: extra decorations were found on these two sarcophagi. It is supposed that this was the home of the chief ruler of the tribe, the priest, or some one of exceptional note. Other structures of a peculiar character were discovered. They were circular, and in the centre of each was a fire-place. One of these was found in each city. Mr. Cushing thought that this round structure was a temple, perhaps, of the sun, as nothing was found in them but the fireplace and some pottery. The one most carefully excavated was about 50 feet in diameter.

Rock-pictures.—Mr. Cushing's party found on the rocks of neighboring mountains rude etchings representing men offering prayers for rain, herders or hunters offering sacrifices. These rock-pictures are interesting as bearing upon the question of the use of domestic animals by these people, and their probable acquaintance with the use of wool: in these petrographs appear representations of animals much like the llama of South America.—*Science*, June, 1888.

GREAT SERPENT-MOUND.—At the annual meeting of the National Academy of Sciences, held in Washington last April, Professor F. W. Putnam presented a report on the progress of the systematic exploration, undertaken last year, of the earthwork in Adams County, Ohio, known as the "Serpent-Mound." It is situated on a bluff, about 100 ft. high, which forms one of the banks of Brush Creek, about 80 miles from its mouth. The mound consists of an oval earthwork about 4 ft. high and 20 ft. across, enclosing a space 80 ft. long and 20 ft. wide. The length of the structure on the outside is 120 ft., and its width 60 ft. There is a little mound of stones within the enclosed space. Near one end of this mound begins another of similar construction, but having the form of a serpent. The jaws are extended as though the snake was about to swallow the oval mound; the head and neck are well defined; the body has three turns, and the tail a double coil. The entire length of the serpent is about 1,420 feet.

Near these principal mounds are several minor ones, and to the south of the serpent a space which bears evidence of having been the site of an Indian village and also a burial-ground. Professor Putnam is convinced that most of the graves are those of interlopers; that is, not of the Indians who built the mound, but of a later race, who probably were ignorant of

their predecessors, and did not know that they were living on an old burial-ground. But the skeletons of two of the supposed mound-builders were found. A section made through the centre of one of the mounds disclosed the bones of several "intruders;" but at a depth of six feet was found the skeleton of the man over whom the mound was raised as a monument. The bones were those of a large man, about six feet in height, and showed him to be a person of massive frame. The body lay upon its back, with the right arm extended at right angles, and the left arm at the side. The only object found near it was a mussel-shell that lay near the bones of the left leg. Beneath the skeleton was a layer of clay that had been placed there, and upon which a fire had been kept for a long time. Near the surface the clay had been burned almost as red as a brick, and it showed evidence of heat to a depth of several inches. On the top of the clay were the ashes from the fire, and perhaps others, several inches thick; and upon these the body had been laid, and the mound erected over it.

The explorations will be continued during the coming summer, and a further report was promised for the next meeting of the academy.—*Science*, April 27.

PERU.

EXPLORATION OF THE BURIAL-GROUNDS OF THE INCAS.—The British consul at Mollendo, Peru, reports that a company has been formed there, with the object of searching for antiquities in the Inca burial-grounds in the district of Cuzco, a concession having been granted by the Government to the company for this purpose.—*Amer. Architect*, July 28.

CUZCO.—The Centeno Collection at Cuzco (said to be the most precious collection of South-American antiquities) has been bought for the Royal Museum at Berlin, and is now on its way to Europe in the German ship *Kosmos*.—*Academy*, Sept. 29.

A. L. FROTHINGHAM, Jr.

SUMMARIES OF PERIODICALS.

BULLETTINO DELL' IMP. ISTITUTO ARCHEOLOGICO GERMANICO. SEZIONE ROMANA. Vol. II. No. 3.—W. HELBIG, *Excavations at Corneto* (pp. 153–8). An account is given of the excavations carried on during Feb. and March 1887 by the municipality of Corneto-Tarquinius between the Arcatelle and the communal road, below the *Tomba del Cita-redo*. The tombs belong to the period when the trench-tomb still predominated, but after the introduction of the corridor-tombs. Full details regarding the objects found are given in JOURNAL, III, pp. 479–80.—P. HARTWIG, *A head of Helios* (pp. 159–66; pls. VII, VII*). This head was discovered in 1857 in the island of Rhodos and purchased at Rome by General E. Haug, then American consul. The work is Greek. It is about half life-size: the top, the back, and the ears are merely sketched; the rest is finished: the short hair falls in ringlets; the eyes are deep-set and glance upwards, the head being turned to the left. Seven holes in the head were evidently intended for metal rays, so often added to heads of Helios: this leads to the identification of the head as one of Helios, which is all the more probable because the worship of the sun-god was very prominent in Rhodos. However, it differs radically from the recognized type of Helios usually represented with well-opened eyes and long flowing hair. The writer's opinion is that it is a fourth-century copy of the bronze Helios in his chariot by Lysippos, who is known to have created a new type of Helios.—P. HARTWIG, *Report on a series of red-figured Attic tazzas with names of artists and favorites, collected at Rome* (pp. 167–70). This collection contains vases with the names of the artists Epiktetos and Philtias, and of the favorites Leagros, Epidromos, Panaitios, Chairestratos, Chairias and Lysis. [These vases have been purchased by the Baltimore Branch of the Archaeological Institute of America for the collection of classic antiquities which it is forming in Baltimore.]—FERD. DUEMMLER, *On a class of black-figured Greek vases* (pp. 171–92; pls. VIII, IX). This class of early vases—amphorae and oinochoai—have passed unnoticed because supposed to be Etruscan. The writer proves them to be Greek and allied to, though very distinct from, the Corinthian vases: some forms, also, are of Attic origin. A Phokaian origin is suggested, and a separate and important class of archaic vases is added to those already recognized. An indication of their age is that one was found at Orvieto in a tomb of the beginning of the VI cent. Animals predominate over human figures.—P. STETTINER, *Remarks on the Etruscan Aes grave* (pp. 193–5).

The common opinion is that the Etruscans were the last of the Italians to adopt the cast *aes grave* as their coinage, and that they copied it from the Umbrians and Latins; this opinion being founded on the inferiority in weight of the Etruscan *assi*. In 1875, some very heavy archaic Etruscan *assi* were found at Corneto, and lately two even earlier ones were found at Chiusi, demonstrating, in the writer's opinion, the fact of the early use of the *as* in both Southern and Central Etruria.—G. LIGNANA, *Faliscan inscriptions* (pp. 196–202). These inscriptions are classified under three groups, communicated respectively by Gamurrini, Helbig, and Fiorelli: the first comprises two inscriptions painted on the borders of two paterae, which read, in Latin translation, *favebit vinum bibam cras carebo*. The second consists of three inscriptions scratched on broken tiles, found at Corchiano, which are supposed to have closed the graves of some *liberti* and *libertae*, the first reading: *Popia Calitenes Aronto Cesies Lartio uxor*. “Calitenes and Cesies are genitives after the Etruscan manner, and form the characteristic of the Faliscan dialect of Corchiano, which adds Etruscan forms to its own Faliscan.” The third was found in a tomb of the necropolis of *La Penna* near Civita Castellana.—F. BARNABEI, *On the libellus of Geminus Eutychetes* (pp. 203–13). This paper illustrates an inscription found on the Via Ostiense which is sufficiently important to be here reproduced: *Cum sim colonus hortorum olitoriorum qui sunt via Ostiensi iuris | collegi magni arkarum divarum faustinarum matris et piae colens in | asse annuis 88. XXVI et quod excurrit per aliquod annos in ho | diernum pariator deprecor tuam quoq. iustitiam Domine Salvi sic | ut Euphrata v. o. collega tuus q. q. Faustinae matris aditus a me permis. | consentias extruere me sub monte m | moriolam per ped. XX in quadra | to acturus genio vestro gratias si memoria mea in perpetuo const. | habitus itum ambitum dat a Geminio Eutychete colono.*

Euphrata et Salvius Chrysopedi Pudentiano Yacintho Sophronio | et Basilio et Hypurgo scrib. salutem exemplum libelli dati nobis a Geminio | Eutychete colono litteris nostris adplicuimus et cum adliget aliis quoq. | colonis permissum curabitis observare ne ampliorem locum memoriae | extruat quam quod libello suo professus est dat. VIII Kal. Aug. | Albino et Maximo cos. This is a decree dated July 25, 227 A. D., under Alexander Severus, preceded by the request for it. Geminus Eutychetes asks that, in consequence of his faithful payment of a large annual rental of over 26,000 sesterces for his property, he be allowed to erect for himself a monument occupying a frontage of 20 ft., and a similar space in width: this request was made to the college owning the land. The inscription is important for the constitution of these colleges or corporations.—A. MAU, *On the meaning of the word “pergula” in ancient architecture* (pp. 214–20). It is known that objects for sale were exhibited to the public in a *pergula*; this was done by artists, artisans, and shopkeepers; and that the *pergulae* were high, and

connected with the *tabernae*. The writer thinks he has found at Pompeii the solution of the question: there exist, in Pompeian shops, above the *taberna*, a room as large as the shop and open on the street, probably provided with a balustrade, while originally, according to the etymology, it was probably an external gallery.

Vol. II. No. 4.—G. F. GAMURRINI, *Very early art in Rome* (pp. 221–34). This paper is written against the common fallacy, that no art existed in Rome and Latium before the second Punic war, and to establish what kind of art did exist there before the rise of Greek influence. Roman tradition ascribed to Numa the associations of arts, among whom were the workers in metal (example, an archaic fibula found at Palestrina, of Phœnician type), and the potters, whose industry was, however, carried on in very modest proportions. In architecture at this period Rome was in advance of the Etruscan cities. In general, Gamurrini concludes, Roman art (like Roman *cultus*) was a reflex of that of Caere, before the capture of that city, and of Veii and Falerii. This was modified at an early date by Hellenism introduced through Massalia and the Greek cities of Magna Graecia (cf. works of Damophilos and Gorgasos in 498 B. C.). The occupation of Campania in 340 B. C. signalled the final fall of Etruscan influence and the supremacy of that of Hellas. Early in the III cent. B. C., there flourished an important Roman school of art whose existence has been demonstrated by remarkable works, like the terracottas of the temples at Falerii, the *Cista Ficoroni* and other ciste and mirrors with Latin inscriptions, the class of delicate pottery called “Etrusco-Campanian,” and even a class of vase-paintings, the type of which is one found at Falerii with Latin inscriptions. This rising art was destroyed by the Punic wars.—F. VON DUHN, *The necropolis of Suessula* (pp. 235–75; pls. XI, XII). An exhaustive and scientific account is given of the excavations conducted in the necropolis of Suessula in Campania between 1879 and 1886: two accounts of previous excavations had already been published by the same author. The substance of this paper is given under NEWS in the JOURNAL, vol. IV, p. 111. The tombs lately discovered disclose a period in the history of Suessula in which the Hellenic influence of Kume had triumphed completely over the early Italic culture, beginning, probably, at the close of the VI cent.: it is represented by archaic bronzes (vases, figures, ornaments and utensils) and figured vases in great numbers varying in date from the severe black-figured to the free red-figured style. From later tombs come an immense number of vases of Campanian manufacture, forming the most instructive series in existence of this style, from the fourth to the second cent. B. C.—C. PAULI, *Inedited inscriptions of Chiusi* (pp. 276–91). In October 1885, an Etruscan tomb was discovered at Chiusi, the ancient Clusium, containing a number of inscriptions on sepulchral tiles and ossuaries: these showed

that the tomb belonged to one of the branches of the large and best-known of Etruscan families, the *Gens Seiantia*.—H. DESSAU, *A friend of Cicero, mentioned in a stamped brick from Praeneste* (pp. 292–4). The bricks of Praeneste generally show different stamps from those found in Rome and the other cities of Latium. A recent stamp is M·LATER·Q·, evidently the *M. Juventius Laterensis*, quaestor, who gave games at Praeneste and was a personal and political friend of Cicero.

Vol. III. No. 1.—F. BARNABEI, *Some inscriptions from the territory of Hadria in Picenum* (pp. 3–13). A sketch is given of the Roman colony of the territory of Hadria, and some inscriptions found by the author in this neighborhood are published. The first, found near Monte Giove, is of the late-Republican period and a *votum* to Jove by members of the Mecia tribe, to which Hadria was attributed: this indicates the existence on Monte Giove of a great temple of Jove, and this is confirmed by another inscription which contains the name of Q. Fabius Maximus Paulus, son of Q. Fabius Maximus, a legate of Caesar in Spain, consul in 743 U. C., pro-consul of Asia in 748 and 749 U. C., etc. He is called *patronus coloniae*, and hence the foundation of the colony is settled to be in the time of Augustus, in 743 U. C. = 11 B. C. Two roads traversed this territory, both branches of the Via Salaria.—A. MAU, *The basilica of Pompeii* (pp. 14–46). This basilica is the earliest known to us, being anterior to 80 B. C. and belonging in its style to the period previous to the Roman colony, when Pompeii was subject to Greek influences. For this reason it is a precious monument for the history of the basilica: nevertheless it has not been carefully studied. The writer believes it to be not of the normal two-storied Vitruvian type but of that represented by the basilica built by Vitruvius at Fano, where the tall columns of the central nave rose up to the roof, the portico being of equal height with the central nave and containing windows which lighted the interior. This is against Lange, who believes that the roof of the central nave rose above the porticos. The central space was covered: the pavement was of *opus signinum*. A double row of columns is engaged in the interior of the walls: they are Ionic, while the central columns are Corinthian. The *tribunal* or Judgment-seat is raised 1.65 met., and has a frontage of six columns. A flight of steps leads directly into the inner portico through a vestibule, probably covered by a pent roof, whose sides are formed by the projection of the side-walls: the portico is in two stories, the lower being formed of a row of four Ionic columns supporting a wall.—PAUL WOLTERS, *The Chalcidicum of the basilica of Pompeii* (pp. 47–60). Mazois' restoration of the chalcidicum or vestibule of the basilica was quite contrary to the evidence of the remains, and must be totally revised. The front-wall is broken by five doors which open between six piers of tufa blocks, of which the two in the centre are

the smallest.—OTTO ROSSBACH, *The plate by Sikanos* (pp. 61–8; pl. 1). This, the only work by Sikanos, though known to Braun and Welcker, has long since been lost sight of: the drawing made for Brunn is here published. The plate is in the severe red-figured style. The centre is filled with a figure of Artemis running from left to right. The inscription reads: ΣΙΚΑΝΟΣ ΕΡΟΙΕΣ ΕΝ. Sikanos was an Attic artist, and his technique still savors of the black-figured style.—P. HARTWIG, *Nereid in the Vatican* (pp. 69–75; pl. II). In the *sala degli animali* at the Vatican is the fragmentary torso of a partially draped female seated on a marine monster. Only the body below the waist is preserved: the drapery is thrown over the limbs, leaving the upper part exposed, and the feet are crossed: in front are remains of two small feet, probably of Eros. The animal is probably a hippocamp. The base is treated in a most unusual manner, as it represents water and waves in which are seen a polyp and another fish. The type of the Nereid riding a hippocamp and attended by Eros is well given on a coin of Bruttion (Head, *Coins and Medals*, pl. 45, 20). The sculpture itself is not Roman but Greek, and belongs to the period of transition from Hellenic to Hellenistic art, perhaps to a type created by Skopas.—F. MOMMSEN, *Three inscriptions of Pozzuoli* (pp. 76–83). Three interesting inscriptions here published and commented, i. e., those of Annia Agrippina, of C. Aelius Gaurus, and of the pantomime Pylades: the last is reproduced in the JOURNAL (p. 367).—CH. HUELSEN, *Epigraphic miscellanies* (pp. 84–92). Publication of the inscriptions of L. Minicius Natalis (see JOURNAL, IV, pp. 214–15), of the equestrian statue of Domitian, and of a gladiatorial tessera.

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ΕΦΗΜΕΡΙΣ ΑΡΧΑΙΟΛΟΓΙΚΗ. JOURNAL OF THE ARCHÆOLOGICAL SOCIETY IN ATHENS. 1887. Nos. 2, 3.—ST. A. KOUMANOUDES, *Attic Inscription concerning a building at Delos*. The inscription here published is cut on both sides of a slab of Pentelic marble which formed the lid of a Byzantine tomb near the Olympieion in Athens. The letters on the under side of the lid are nearly all destroyed, and the lower end of the stone is broken off. The inscription appears to belong to the middle of the fourth century B. C. The contractors are to furnish bondsmen. An architect and a *ἐπαρχιτέκτων* are mentioned. The officials in charge of the building are the *ναοποιοί*. The building had columns and porticos, and may have been a stoa or a temple. The materials, which were to be brought from Attika, are carefully specified.—ST. A. KOUMANOUDES, *Two Boiotian Skyphoi* (pl. 5). These vases are in Athens. The representations upon them are in somewhat rude relief, and resemble those of the two similar vases published *Εφ. Ἀρχ.*, 1884 (March). Upon No. 1, six scenes from the *Iphigenia in Aulis* of Euripides are represented. Each figure has its

inscription. *Κλυταιμῆστρα* is spelt without N, as in the oldest mss. of Aischylos and Sophokles. An additional inscription reads *Εὐριπίδων Ἰφιγενείας*. The vase seems to belong to "Roman times before Christ." No. 2 is somewhat fragmentary. Upon it are represented three quadrigae with armed warriors. All are galloping toward a rough wall at the extreme left. An inscription designates this as *χάραξ Ἀχαιῶν*. Further inscriptions are *Ὀδυσσεύς* and . . . *ΜΕΝΩΝ*, perhaps Agamemnon. The scene is evidently from the Trojan war.—CHR. TSOUNTAS, *Inscriptions from Eretria*. Three inscriptions are published. The first two are honorary decrees of the third century B. C. The third is a long list of names, probably an appendix to a decree. The names are grouped according to demes, of which twelve occur in the following forms: *Βουδιόθεν, Ὠρώπιοι, Ἰστιαεῖς, Κωμαιοί, Τρυγχεῖς, Περαεῖς, Ταμυνεῖς, Μυθούντιοι, Λάκεθεν, Παρθενεῖς, Αἰγλεφειρεῖς, Κοτυλαεῖς*. The date is probably the second century B. C.—D. PHILIOS, *Inscriptions from Eleusis* (continued: see *Ἐφ' Ἀρχ.*, 1887, p. 1). No. 31 is an accurate publication of *C. I. G.*, I, 392. No. 32 is, like No. 31, inscribed upon a simple pedestal. The Senate and the People consecrate to Demeter and Kore (a statue of) the *ἐξηγητής* Medeios of the Eumolpid race, son of Medeios, from the Peiraieus, on account of his careful service to the goddesses. The date is the priestessship of Kleokrateia daughter of Oinophilos of Aphidnai. No. 33, inscribed upon a pedestal, records that Quintus Auli f. Pompeius made and dedicated together with his brothers Aulus and Sextus (a figure of) *Αἰών* for the power of Rome and the endurance of the mysteries. This artist is otherwise unknown. No. 34 reads *Ε[ὐ]β[ουλί]δης Εὐχαιρος | Κρωπί]δης ἐποίησεν* (cf. Loewy, *Ins. gr. Bildh.*, p. 100, Nos. 133 ff., 222 ff., 542 ff.).—O. BENNDORF, *Pinax from the Akropolis at Athens* (pl. 6; 5 cuts). A Pinax (cf. *Am. Journ. Arch.*, II, p. 65) is published and discussed. Upon it an armed warrior is represented. The colors used are yellow, brown, dark red, and black. The original inscription seems to have been *Μεγαλῆς καλός*, but the name was erased and another, apparently *Γλαυκύτης*, written over it. The upper edge of the pinax is adorned with a scroll pattern, showing that it was intended to be seen. The plaque may have been part of some such ornament as the barriers of the throne of Zeus at Olympia (Paus., VII. 4). The style is that of the early part of the fifth century B. C. The four colors used agree with the reports of ancient writers about Polygnotos, and the use of the colors without shading may give some idea of Polygnotos' style. This is exemplified by a short discussion of the paintings in the Lesche at Delphoi.—B. STAES, *Archaic Statue from the Akropolis* (pl. 9). A female statue found near the Erechtheion in 1886 is published in colors (cf. *Musées d'Athènes*, pl. x; *Journ. Hell. Stud.*, VIII, p. 163; *Am. Journ. Arch.*, II, p. 63). The colored plates give a much better idea of the beauty of this work of archaic art than can

be derived from photographs.—FR. STUDNICZKA, *Statuettes of Athena from the Akropolis of Athens* (pls. 7, 8; 15 cuts). Four archaic bronze statuettes are published. Three of these have bases with dedications, while the fourth lacks both pedestal and feet. The figures all represent Athena Promachos, and all but one have the Aegis. They seem to belong to the sixth century B. C. All exhibit non-Attic traits, and the most beautiful among them shows marked resemblance to the Athena of the eastern pediment of the temple at Aigina. This type of Athena probably does not, however, come from Aigina but from Ionia or the Ionian islands. A fragment of bronze, evidently part of the breast of a figure of Athena, is published. A headless marble statuette of Athena, discovered in 1864 on the site of the Akropolis Museum, is published and discussed (*cf. Arch. Ztg.*, 1864, p. 234; *ibid.*, 1885, p. 213 ff.; *Mith. Athen.*, 1881, pp. 86, 93; Roscher, *Lex. d. Mythol.*, pp. 695, 1720; Studniczka, *Beitr. zur Gesch. d. gr. Tracht*, p. 142, fig. 47). The style of the figure is that of the Peloponnesian school, to which the sculptural adornment of the temple of Zeus at Olympia must be assigned. The date is about 480 B. C., toward the end of archaic art. That the clothing of the figure is Attic, is explained by the fact that it was to be set up in Athens.

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JAHRBUCH D. K. DEUT. ARCHÄOLOGISCHEN INSTITUTS. Vol. III. 1888. No. 2.—C. ROBERT, *The Interpretation of the Telephos-frieze from Pergamon* (12 cuts). VI. Further scenes from the youth of Telephos are recognized: (1) the killing of the Aleadai; (2) the *πρόθεσις* of a corpse, perhaps of one of the Aleadai; (3) a scene in a sanctuary of Dionysos; (4) a battle-scene; (5) a youth fleeing into a ship, probably a scene from the battle of the Kaikos; (6) a fragment of a ship, belonging perhaps to the same part of the frieze; (7) the foundation of Pergamon. VII. The extant fragments of the frieze make a computation of its entire length possible. It cannot have been less than 70 met. Bohn's conjectural plan of the great altar leaves an opening of 20 met. on the west, which reduces the inside length of the peribolos-wall to 62 met. Either, then, the opening in the wall must have been less than 20 met. (Robert suggests 2) or the frieze must have been continued on the outside of the western wall, and perhaps on the northern and southern walls which projected toward the west. The arrangement of the parts of the frieze about the altar cannot as yet be determined with certainty, but, with the help derived from the existence of several corner slabs, reconstruction is attempted.—A. FURTWÄNGLER, *Studies on Gems with Artists' Inscriptions* (pl. 3; one cut). Introductory remarks are followed by 1. *Gems with Artists' Inscriptions in the Berlin Collection*. 27 gems are published and discussed. These are (a) five cameos, and (b) twenty-two intaglios. Nine inscriptions are given in

facsimile. Of the gems, 14 are regarded as antique (though one has a modern inscription), 13 as modern.—E. LÖWY, *Vase of the Faina Collection in Orvieto* (pl. 4). A red-figured vase is published. A mounted barbarian archer is represented on the inner surface of the shallow vessel. The inscriptions are κα[λός], Λύκος, [Πα]ναί[τος], and Δ(?)ορ[ς], i. e. *Doris*. In the discussion of this vase the Theseus-kylix by Duris (*Brit. Mus. Catal.*, 824) is mentioned. An *Appendix* by CECIL SMITH gives an accurate description of the Theseus-vase illustrated by 17 cuts.—H. HEYDEMANN, *Berlin Antiques*. 1. The so-called kanephoros from Paestum, in Berlin (*Arch. Ztg.*, 1880, p. 27 ff; pl. 6), was part of a lychneion or candelabrum. 2. The torso in the Berlin museum interpreted by Overbeck (*Kunstmythol. Apollon*, p. 219, fig 14) as Apollon is to be restored as a boxer σκαμαχῶν. 3. Upon an amphora in Berlin (Furtw., *Catal.*, 2170; Gerhard, *Auserl. Vasen*, pl. 299) by Epiktetos two goddesses are represented. This is an abbreviation of the scene of the Judgment of Paris. A list of similar abbreviations is given. 4. The gem Tölken, *Gemmensamml.*, I. 80 (= Winckelmann, *Descr. Stosch.*, III. 201) is interpreted as Iphigeneia. Tölken, II. 70 (= Winckelmann, II. 1769) is not Herakles, but a Seilenos. Tölken, III. 42 (= Winckelmann, III. 8) represents a youth preparing to spring into the water.—C. BELGER, *The wound of the Dying Gaul*. The writer maintains his previous opinion (*Arch. Ztg.*, 1882, p. 328 f.), that the dying Gaul has been wounded by the enemy, against Professor Overbeck (*Renuntiationsprogr. d. phil. Fakultät*, Leipzig, 1887; *Archäol. Miscellen*, IV, p. 25-29), who thinks his wound is self-inflicted.—BIBLIOGRAPHY.

HAROLD N. FOWLER.

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—A. S. MURRAY, *A Rhyton in form of a Sphinx* (pp. 1-5; pls. LXXII, LXXIII). This rhyton, found at Capua in 1872 and described in the *Bullettino* of that year, is now in the British Museum. The subject of the vase has been called "Triton, Nike, and other figures." The figure named Triton, which ends in a serpent's tail (not that of a fish), must be Kekrops. The incident represents Kekrops, his three daughters, and Erichthonios, soon after Pandrosos has opened the basket in which the boy lay. The scene well illustrates Eur. *Ion*, 1163. The vase-painter and Euripides seem to have taken a common inspiration from some unknown work of art at Athens. The author makes some interesting remarks as to the relation of the *Ion* (especially vv. 184 ff., 206) to sculptured subjects at Delphoi. This rhyton was evidently imported from Athens, and its date is about 440 B. C.—F. IMHOOF-BLUMER and P. GARDNER, *Numismatic Commentary on Pausanias, III* (pp. 6-63; pls. LXXIV-VIII). This valuable commentary is here completed. It covers Paus., IX, x. 1-38; viz., Boiotia, Phokis, and Athens,

with a supplement containing coins of Peloponnesos omitted in Parts I and II. Coins are described and figured illustrating works of art and mythological types, many of which are mentioned by Paus., in Plataia, Thebes, Tanagra, Haliartos, Thespiæ, Koroneia, Phokis, Delphoi, Elateia, Antikyra, Athens, Eleusis, Oropos, Salamis; in the supplement, Megara, Pagai, Korinth, Tenæa, Sikyon, Phlious, Kleonai, Nemea, Argos, Epidaurus, Aigina, Troizen, Hermione, Lerna and Nauplia, Lakedaimon, Gytheion, Kolonides, Asine, Pylos, Patrai. A triple index follows, of artists, cities, and subjects.—W. R. PATON, *Excavations in Caria* (pp. 64–82; figs. 1–29). Mr. Newton had visited Assarlik, and identified it with Syangela (Souagela), the ancient Karian city. This article describes four tombs found near this city: the tombs are tumuli, and are surrounded by a circular wall; at the centre is the sepulchral chamber closed at the top by large stones; two burial enclosures are rectangular. Several other tombs were visited, near Mandrais, one of which is very remarkable; in general plan it resembles the Assarlik tombs, but is much more elaborate: probably it is the tomb of one of the Karian princes mentioned in the Attic tribute-lists. In these ancient Assarlik tombs were found articles of bronze, gold, iron (fibulae, knives, a ring), and pottery (bowls, amphoræ, a Bügelkanne, a kylix, etc.). The pottery and the terracotta sarcophagi are covered with elaborate geometrical designs. There is no trace of any other design; the fibulae are all of one pattern; the weapons are exclusively of iron; the bodies in all cases had been burnt. These facts are of great importance for the light they throw on the civilization of the Leleges; and the fact that the geometric system of decoration prevailed in this very elaborate stage, among these people, is of great significance in the present stage of conjecture concerning early Greek pottery. The author controverts the identification of Assarlik with Souagela, and that of Chifoot Kale with Termera; Souagela was probably at Tchoukcheler. An inscription found *in situ* at this place contains the letters ΠΙΓΡΕΟ: Pigres is mentioned in the Attic tribute-lists as despot of Souagela. If this identification be correct, Assarlik must be Termera.—E. L. HICKS, *Iasos* (pp. 83–118). A sketch of the history and antiquities of Iasos (not Iassos), from literary and epigraphical sources, down to the Christian era. The famous Iasian decree of the third or fourth century B. C. (Houssouillier, *Bullet. d. Corr. Hellén.*, 1884, pp. 218 ff.) which gives a picture of Greek life, vivid as an instantaneous photograph, true of each century of Greek freedom and of many towns, is restored more fully than hitherto, and discussed in detail. In particular, the means resorted to by the Greeks for securing attendance at the ekklesia (fines, chalking, fees, raising of *σημαῖον*, water-clock, etc.) are described, with authorities. The article abounds in acute observations.—E. A. GARDNER, *Two Naucratis Vases* (pp. 119–21; pl. LXXIX).

The special name "Naukratite" has been given to a class of vases from Naukratis, covered with a whitish glaze and having a polychrome decoration outside; black inside with lotos patterns in red and white. One of these vases represents this type, and the other, another local style. Vases of the class known as "Naukratite" are almost always of the typical krater shape; four colors are used in the polychrome decoration; incised lines are never found on the finer specimens, but the outlines are drawn with a brush. The finest styles of pottery from Naukratis have not yet been published.—W. LEAF, *Trial Scene in Iliad XVIII.* 497-508 (pp. 122-32). There are two scenes here: the dispute in the market-place, amid the clamorous people, one litigant claiming that he has paid the penalty for the man slain, his adversary refusing to accept any payment (ὁ δ' ἀναλύετο μηδὲν δέσθαι), both wishing to refer the matter to an ἴστωρ; and, second, the scene in court where the γέροντες are judges. The three stages by which criminal law regulating blood-guiltiness arose were: first, blood-feud; second, the penalty of exile (Hom., *Il.*, XXIV. 480; IX. 632-6); and, third, the payment of blood-price by the offender. This scene represents a period of transition, between the second and third stages. The man-slayer claims expiation by a payment; the next of kin refuses to accept the payment of money, and demands the penalty of exile. The matter thus becomes one of public character; the ἴστωρ before whom the disputants take issue, who is competent to act in private cases, refers this, a public matter, to the γέροντες, who decide it with all the formality of a political debate. The archaic procedure known to Roman law as *legis actio sacramenti*, "a dramatization of the origin of justice," is, according to Sir H. Maine, a parallel case; the praetor, casually present, to whom the disputants appeal as arbiter, represents the ἴστωρ; but Sir H. Maine misses an important point when he speaks of the council of γέροντες as merely standing for the ἴστωρ. The case in the *Iliad* is not a private one: the zeal with which the people take it up make it one of public moment; hence the ἴστωρ must call the council to his aid. The *legis actio sacramenti* illustrates another point: the two talents of gold (508) have been identified by Sir H. Maine with the *sacramentum*—they are far too small a sum to represent the price of the slain man—a deposit by the litigants, under the form of a wager, which was taken by the courts as remuneration for trouble and loss of time. It is, however, impossible to decide, from the uncertainty of the meaning of δέσθαι εἰρεῖν (either "to pronounce a judgment," or "to plead a cause"), whether this sum should go to the councillor whose judgment contributed most to the final decision, or, as an actual wager, not to the court, but to the successful litigant. The procedure in this case, the importance of which consists in the actual appointment of an ἴστωρ and in the reference by him to the council of state, seems to have been a regular

part of early Greek criminal action, as is seen by a comparison with the *Eumenides*, the jurisprudence of which supplements that of the Homeric scene in a remarkable way. Here the *ἵστωρ*, praetor, chief of state, is Athena; the *αἰτίας τέλος* (*Eum.*, 434) is Attic for the Epic *πείραρ*; Athena refers the case to the people, gathered on the hill of Ares, as the *γεγονοσία* in the "holy circle"; *πιφαύσκω* (620) is used in identical senses; the judges in both scenes rise to give sentence in turn. This close parallelism shows that these two trials represent one form of procedure, the oldest in chronology, though not in evolution, known to us in the history of European law. The Icelandic story of Burnt Njal, with its almost identical procedure, confirms this explanation.—W. RIDGEWAY, *The Homeric Talent: its Origin, Values, and Affinities* (pp. 133-58). In the Homeric Poems are two systems of denominating value: that by the ox (or cow) and that by the talent. The talent, which is always of gold, is the younger, and merely represents the older ox-unit, and is not independent of it, as maintained by Hultsch, and others. Values thus may be expressed indifferently in oxen or in talents, the older name prevailing, after the fashion of *pecunia* in Latin. This view the author sustains by several arguments, based on Pollux ix. 60, Herod. vi. 97, and an anonymous Alexandrine metrological writer (*Rel. Script. Metrolog.*, ed. Hultsch, i, p. 301): he infers accordingly that at Delos the $\beta\omicron\upsilon\varsigma = 2$ Attic gold drachms = 1 daric = 1 *τάλαντον* = 1 light shekel = 130 grs. These equations represent the earliest Hellenic traditions. This identification of the ox and the Homeric talent is of importance: it explains the ox-type of the coins of Euboeia; it explains the proverb *βοῦς ἐπὶ γλώσσῃ*; it clears up several dark places in Homer, furnishing a common measure for values of prizes, gifts, etc. By taking the ox as the primitive unit, a simpler account of the genesis of the Greek and oriental standards of value may be gained. Here the author breaks wholly with current opinion on these subjects: he aims to show that the Hellenes, before they came in contact with the Phoenicians or Lydians, had a unit of their own based on the ox: in the "Euboeic" standard the unit of 135 grs. is practically identical with the Homeric ox-unit. The Aeginetan standard of 194 grs. (originally over 200 grs.) is derived from the same unit, as follows: in early times in Greece, gold seems to have stood in value to silver as 15:1; hence, an amount of silver equivalent to one gold unit gives us the following: $135 \times 15 = 2025$ grs. of silver = 10 silver staters of 202.5 grs. each. This gold ox-mint was derived from India: the *hiranya-pindas* (*Rgv.* vi. 47, 23-4; 488, 23-4), "gold-nugget," is the first gold unit, borrowed by the Shemites and Greeks, and called by them, respectively, *shekel* and *stater*: the *manā*, meaning a certain number of these units, probably also came from India. There was a general uniformity in the value of the ox and its metallic representatives, and this

explains the close agreement between standards of various regions (Egyptian ring-money, Hebrew ring-money (?), Babylonian light gold shekel, Lydian gold stater, Persian gold daric, Euboic-Attic silver, Aiginetic gold unit (?), Carthaginian standard,—ranging between 127 grs. and 135 grs.). An instructive illustration of the evolution of the monetary system from a primitive ox-unit may be seen in Ireland (*cumhal*, in the Brehon laws, properly meaning "a female slave," commonly expresses the value of three cows: compare the slave-woman offered as a prize by Achilles, valued at four cows). The author criticises current theories, especially as to the Babylonian sexagesimal system, and proposes his own views with diffidence. This notable and revolutionary article must attract attention.—E. A. GARDNER, *Recently Discovered Archaic Statues* (pp. 159–93). The archaic statues and inscriptions recently discovered on the akropolis of Athens have made important additions to our meagre knowledge of the history of the early Attic school of sculpture. In names we are richer: the period of Antenor is dated by an inscription; Euenor, Eleutheros, Philon, Thebades were busy during the same period. Though we possess neither work nor copy traceable to Kalamis, yet we can now form some conception of the style of this famous and representative master. The statues which form the subject of this paper were found carefully buried northwest of the Erechtheion: they had been knocked down and broken by the Persians, and were buried when the north wall of the Akropolis was building. The lower limit of their date is thus 480 B. C.: the inscriptions found with them fall, by their forms, into the period 525–500 B. C. Except two, all the statues are distinctly Attic, though they bear a general resemblance to other types: they may be grouped into three periods—the archaic, the transitional, and the early fine Attic. Into the first group fall four examples of the common type Atticised, in which there is a tendency to delicacy with some Attic brightness; also four examples of a distinctly Attic type, in which the Attic characteristics of greater attention to general impression, especially of the face, are evident; the archaic smile is preserved but it is no longer a meaningless grimace. Of the transitional Attic there are three or four examples, in which drapery is treated with great elaborateness and skill, and the hair is managed with greater freedom. Of the early fine Attic only one example has been found, but this is a beautiful work: the advance is apparent, especially in the face with its idealized smile (*σεμνὸν καὶ λεληθὸς μειδίαμα*), and half-melancholy expression; this marble strikingly resembles the Aristion stele in some of its features. Though hardly from the hand of Kalamis, it must be a good type of his style. The author also treats in detail the following questions raised by the statues, viz., the use of insertions, drapery, color, and subjects represented. Color is never applied in mass to a broad flat surface,

and thus never obscures the modelling or hides the texture of the marble: the colors most used are dark green, and dark purple; red and blue are also found; the hair is of a uniform reddish-brown color; the common designs are meander and palmetto. As to the subjects represented, it is at present impossible to come to a decision. They cannot be statues of Athena. The type is common, and seems to have originated in primitive representations of the great female goddess frequently spoken of as the later Greek Aphrodite. The type was often transferred from the goddess to her worshippers, who thus dedicated to her their own images; hence, priestesses and worshippers, as well as goddesses, were represented and dedicated; of course the statues were not portraits, but were variations on the original type. In conclusion, the author discusses the head found at Ptoos (*Bull. de Corr. Hellén.*, 1886, pl. v), in which he recognizes the technique of σφυρήλατα; he also briefly treats of the development of the two distinct types of facial expression in archaic sculpture, designated the "stolid," and the "smiling": the former (Apollon of Orchomenos, etc.) is essentially realistic; the latter aims to avoid lifelessness by adding a pleasing expression (Hera of Olympia, Nike (of Archermos?), Apollon of Tenea), which in the earlier examples becomes a grimace. The former type, vastly improved, becomes the type of the schools independent of Attic influence (Pythagoras of Paros, the Argive school, etc.). The latter type in its more refined forms appears in the Aigenetan and Attic schools; the success of Attic artists led to the extension of this type, which, however, frequently appears in unsuccessful imitations. These propositions are developed by the author in a review of many examples, including the "Apollon" statues.—J. E. BURY, *The Lombards and Venetians in Euboea*, 1303–1340 (pp. 194–213, to be continued). The history of these years is treated in detail, comprising among others the following topics: Disputes between Lombards and Venetians, the Infant Ferdinand and Ramon Montaner at Negroponte, battle of Kephisos (March 13, 1311), schemes of Bonifacio da Verona, Venice and the Triarchs at war with the Catalans, Pietro dalle Carceri, and the increase of Venetian influence in Euboea. The history of the Venetians in Euboea is a good example of the manner in which the efficient protector becomes the ruler. It was the three wars, (1) with the Greeks, (2) with the Catalans, (3) with the Catalans and Turks, that contributed more than anything to secure the Venetian supremacy in Negroponte. The other side of the same fact is the declining power of the Lombards; Pietro dalle Carceri was less powerful than Bonifacio, and Bonifacio was less powerful than Guglielmo da Verona.—E. A. GARDNER, *An Inscription from Boeae* (pp. 214, 215). An inscription of 16 lines, in elegiac verse, of Roman times, from Boeae, the modern Neápolis, in Laconia: it is to the memory of Ἀρίσκουσα (Blandina), and

celebrates the maiden's manifold virtues.—A. H. SMITH, *Notes on a Tour in Asia Minor* (pp. 216–67; with map). This tour was made in 1884 with Professor Ramsay in the upper valleys of the Maiandros, of Karasu (Morsynos), and of Gerenis Tchai (Indos); in the valleys of Gebren Tchai, and of the Istanos Tchai; and in the district west of the lake of Buldur: i. e., in the border-lands of Karia, Phrygia, and Peisidia. A map is furnished, based on original observations, together with tables of places visited and identified. Topographical notes follow, with copies of inscriptions (58), either copied for the first time or corrected. The inscriptions are mainly of Roman and early-Christian times, and are miscellaneous in character (honorary, sepulchral, dedicatory, etc.). The reliefs representing the θεὸς σωζων at Telfeny are described, and a long inscription from Hei-ja, near Telfeny, hitherto transcribed only in part, is given in full: it contains a list of subscribers, for some public purpose, with their respective contributions. No. 50 contains a series of γνωμαὶ μονόστιχοι (cf. *C. I. G.*, 4310 add.). No. 38 was probably on a Christian altar dedicated to Constantine and Helena. The new proper name Ένας occurs several times; in No. 16 (apparently of A. D. 199) ὁροφύλαξ occurs, a new word.—J. E. HARRISON, *Vase representing the Judgment of Paris* (note, p. 268). This vase (published in *J. H. S.*, vol. VII, 2), the provenance of which was supposed to be unknown, came from Camucie in Italy.—SUPPLEMENT. F. C. PENROSE, *Excavations in Greece, 1886–87* (pp. 269–77; figs. 1–4).—E. A. GARDNER, *Sculpture and Epigraphy, 1886–1887* (pp. 278–85).—NOTICES OF BOOKS (pp. 286–316). (A) Art and Manufacture. PETRIE, *Naukratis* (P. G[ardner].); S. REINACH, *Conseils aux Voyageurs archéologues* (W. W[ayte].); FURTWÄGLER, *Beschreibung der Vasensammlung* (Berlin); KLEIN, *Die griech. Vasen mit Meistersignaturen*; KLEIN, *Euphronios*; WINTER, *Die jüngeren attischen Vasen*; MORGENTHAU, *Der Zusammenhang der Bilder auf griech. Vasen*; SCHNEIDER, *Der Troische Sagenkreis in der ältesten griech. Kunst*; VOGEL, *Scenen Euripideischer Tragödien in griech. Vasengemälden* (J. E. H[arrison].). (B) Inscriptions. MEISTERHANS, *Grammatik der attischen Inschriften* (E. L. H[icks].); COLLITZ, *Sammlung der griech. Dialekt-inschriften*, Bd. I (E. S. R[oberts].); LÖWY, *Inschriften der griech. Bildhauer*; REINACH, *Traité d'Épigraphie grecque* (E. A. G[ardner].); LATYSCHEV, *Inscriptiones Tyræ, Olbiae, Chersonesi Tauricae, etc.* (W. W[ayte].). (C) History and Antiquities. BUSOLT, *Griech. Geschichte*, Theil I; ALLEYNE-ABBOTT, *translation of Duncker's History of Greece*, vols. I, II; HOLM, *Griechische Geschichte* (A. G[oodwin].); HEAD, *Historia Numorum* (P. G[ardner].); BELOCH, *Die Bevölkerung der griechisch-römischen Welt* (H. B. S[mith].).

No. 2. October, 1887.—A. S. MURRAY, *Two Vases from Cyprus*, (pp. 317–23; pls. LXXXI, LXXXII). Distinct evidence of the influence of the

outside Greeks upon pottery in Kypros was brought to light for the first time by the excavations at Poli-tis-Chrysokhou (ancient Marion) in 1886. Among the antiquities there found are the two vases here published. The former an alabastos, covered with a creamy slip, represents in fine black lines two female figures on either side of a crane. The vase is signed *Pasiades* (not *Iasiades*, as Klein gives it): this artist, then, must belong to the school represented by the names *Psiax*, *Panphaios*, *Epiktetos* and *Kachrylion*. The second vase is a red-figured Athenian aryballic lekythos, with accessories in white (Athena and the Sphinx) and gilt. The figures, identified by inscriptions, are *Oidipous*, slaying the prostrate Sphinx, with *Athena*, *Apollon*, *Kastor*, *Polydeukes*, and *Aineas*, as interested observers: the last three are conventionally added, as of beings who were familiar to the Greeks for the help they rendered in time of need. The position of the figures confirms Jahn's view, that *Oidipous* despatched the Sphinx only after she had thrown herself down. The date of this vase cannot be far from 370 B. C.—A. MICHAELIS, *The Knidian Aphrodite of Praxiteles* (pp. 324–55; pl. LXXX, figs. 1–8). The plate represents two views of a cast, made for the S. Kensington Museum, of the statue of *Aphrodite*, near the large staircase in the *Sala a croce greca* of the Vatican Museum: the statue was temporarily divested of its tin drapery for the purposes of the cast. The restorer of this statue has erred in unduly lengthening the legs, thus making a small pedestal necessary for the hydria. This statue cannot have been the same as that famous one which, from the time of Julius II until the close of the last century, adorned the *Cortile delle statue* in the Vatican Belvedere: the latter is now in the magazines. After passing in review the various Vatican statues of *Aphrodite*, the author gives a critical catalogue of the repetitions of the *Knidian Aphrodite*: it includes 8 full-size or colossal statues; 16 torsos and other fragments, either un-restored or made up into statues; 10 statuettes and other small copies; 12 minor variations of the type (intaglio, marble, and terracotta). This long list shows the popularity of this type in the ancient world, which is equalled only by those of the more modern, i. e., Hellenistic character, as the *Capitoline Medici* type, the goddess arranging her sandal, the crouching *Aphrodite*. The close agreement of the well-known imperial coins of *Knidos* with this type shows that it goes back to the masterpiece of *Praxiteles*. In the original the goddess rested on the right leg, her right side and leg forming a *Praxitelean* curve; the left knee is slightly bent forward, and the left foot touches the ground only with its toes; the upper part of the body shows a slight inclination forward, less than that in the *Capitoline* type; the abdomen is shielded by the right hand. The left side, being nearly perpendicular, requires some supplementary object; this requirement is served by the drapery, which also serves as a material sup-

port, and thus replaces the trunk of a tree, or a similar support, in the Olympian Hermes and in the Sauroktonos; the left shoulder is raised a little above the level of the right; an armlet, slightly ornamented, seems to go back to the original. The forms of the body are full and rounded (Luc., *Amor.*, 14); the original can hardly have been larger than life. There are two points on which the copies do not generally agree, viz., the drapery and vase, and the position of the head. The author holds that the goddess is laying aside her drapery, not putting it on; the drapery was probably a large rich mass, held with the left hand not far from the waist, and the vase was probably a hydria. This goddess is thus not a counterpart of Aphrodite Anadyomene, returning to the sea (Murray), but, represented as in a *genre-scene* (thoroughly characteristic of Praxiteles), she is preparing for her bath. The head was turned slightly to the left (not in profile, as in the coins), a pose characteristic of Praxiteles, who likes to represent faces in three-quarters view. The wavy hair was simply parted and turned back; twice encircled by a simple fillet, it was gathered into a small knot behind. The best replica of the face and neck is a small head found Jan., 1881, in the Leonidaion at Olympia (Mrs. Mitchell, *Hist. of Anc. Sculp.*, p. 452; Baumeister, *Denkm.*, II, p. 1087). The engravings give this head a wrong pose: the plane of the face should be nearly vertical, not inclined backward. In this replica, the charm of the eyes, the grace of the mouth and chin, and the beautiful junction of neck and head, recall remarkably the art of Praxiteles. Imagine the whole figure executed in an equally refined but less sketchy style, and we have a *δαίδαγμα κάλλιστον*, which though hardly an *οὐραία Ἀφροδίτη* is still the most perfect outcome of an artistic tendency, which prevails in Praxiteles, to transport the gods into the reach of human feelings, while they still retain intact the ideal spirit of divinity, and are far removed from the vulgarity of mere earthly instincts. —D. G. HOGARTH, *Inscriptions from Salonica* (pp. 356–75). Twenty-seven inscriptions chiefly of Roman and Christian times, and, except the first three, sepulchral in nature. In Salonika itself Hellenic remains are few, probably because two or three towns are here built, one on top of another. Inscription No. 1 is part of an imperial letter to the Thessalonians; No. 2 is a dedication by the city to the Emperor Claudius; No. 3 is a public document of the time of Antoninus Pius, relating to certain *κινήγια*. No. 9 is in elegiac distichs. With several of the inscriptions were sepulchral reliefs of a low order of art. No. 28 supplements and corrects *C. I. G.*, 1988. —D. G. HOGARTH, *Apollo Lermenus* (pp. 376–400). In May, 1887, Professor Ramsay, Mr. H. A. Brown and the author discovered near Badinlar, three hours north of Demirdjikeui, in the Tchak district important ruins with many inscriptions. The site of the temple of Apollon Lairmenos was discovered and identified by an inscription of 209 A. D. Thirty-eight

inscriptions found here or in the vicinity are published: Nos. 12-20, of most barbarous orthography, represent the god as a malignant divinity, punishing offenders (*ιεροί, ιεραί*) for violation of certain points of religious observance. The inscriptions add much to our knowledge of this cult of Apollon, who with Leto, the Mother, divided the religious supremacy in this portion of the Maiandros valley. The central shrine was found, once replete with inscribed tablets, emancipatory, votive, and honorific, situated on a consecrated *χωρίον*, and surrounded by a *κώμη* lying within the pale which none might enter without purification. The service of the temple was performed by members of hieratic families, normally resident in the neighborhood, but performing their duties in courses, and separated, during such periods, from their ordinary avocations and family relations. In atonement for offences against ceremonial law, the offender makes public confession, and erects a votive tablet recording the same. The character of the worship seems to have been orgiastic, and sensual. The whole set of inscriptions form a curious memorial of the religious life of this pastoral district in the period immediately preceding the general spread of Christianity through Phrygia by the labors of St. Abercius. Among the inscriptions gathered from outlying villages, No. 21 is noteworthy as containing a law regulating vineyards, passed in the interest of the *δεσπόται τῶν ἀμπέλων*. The number of dated inscriptions deserves note: No. 1 is dated 209 A. D.; No. 23, 137 A. D.; No. 27, 151 A. D.; No. 28, connected with a *θυσιαστήριον* set up in the episcopate of Kyriakos, is dated 667 A. D. Two inscriptions copied by Professor Ramsay are added, with his account of them. One of these furnishes the names of two new villages, and, for a third, the correct spelling, Salouda (instead of Salsalouda).—E. L. HICKS, *A Thasian Decree* (pp. 401-8). This fragment was found by Mr. J. T. Bent in 1886: it contains 23 lines, and the letters are engraved *στοιχηδόν*. It consists of a part of a decree passed by the oligarchs at Thasos in 411 B. C. (Thuk., VIII. 64), and provides that the honors and privileges granted by the preceding government shall be cancelled; rewards are voted the slaves (?) who had assisted in the revolution; outlawed members are to be *ipso facto* restored to civic rights upon their return to Thasos; rich men are invited to contribute money to the needs of the State; the present decree to be a fundamental law of the constitution, to be inscribed, both in original and in duplicates: every member of the demos as constituted by the oligarchs (*βουλή*) shall take the oath; a two-fold date, the names of one Athenian and of three Thasian archons follow. On mere palaeographical grounds one would be inclined to place the inscription later than 411 B. C.: the fact probably is, however, that Ionic palaeography underwent little or no change in the fifth and fourth centuries. The dialect is consistently Ionic: noteworthy, as an index of date, is O for the genuine dyphthong OY in

TOTO = τούτο: εἰως is spelled εἰως, which shows the Ionic tendency to introduce an *iota* after *epsilon* (cf. *ρείονσαι*, etc.).—E. L. HICKS and J. T. BENT, *Inscriptions from Thasos* (pp. 409–38). Forty-four inscriptions copied by Mr. Bent in 1886. No. 1 contains merely the names of three archons, five *πολέμαρχοι* (perhaps equivalent to *στρατηγοί*), one *ιεροκῆρυξ* and three *ἀπολόγοι* (financial officials). The inscriptions are dedicatory, honorific, and sepulchral, and range in date from 200 B. C. to Christian times. At the theatre many seats are roughly inscribed, some of which bear single large letters (Α, Ω, Ξ, Π). Mr. Bent adds a note on the three buildings excavated by himself at Thasos, viz., the temple at Alki, the theatre, and the Roman arch.—J. E. HARRISON, *Itys and Aedon: a Panaitios Kylix* (pp. 439–45; figs. 1, 2). This kylix, now in Munich, is notable, both as presenting a unique form of a familiar myth—the slaying of Itys—and as being inscribed by the love-name *Panaitios*. It was first discussed by Helbig in the *Bullettino* for 1878, p. 204. The writer claims that not Prokne, but Aedon, the original nightingale, is represented, and that the vase-painter thus presents the Homeric and not the Attic form of the myth which is seen in a Paris kylix. A woman holding a sword in her right hand is about to plunge it into the neck of the naked Itys, who lies supine upon a couch: ITVS is clearly read, and ΔΙΕΔΟΝΔΙ must be intended for *αἰέδονα, an assumed form parallel to ἀηδών. The story is given in full in Hom., *Od.* xix. 518 ff.; cf. the Schol. and Eustathios. Are we to connect this vase with Duris or with Euphronios, with both of whom the name *Panaitios* is associated? Probably with the latter and in his later manner; cf. the similar poses in his Proilos vase.—W. R. PATON, *Vases from Calymnos and Carpathos* (pp. 446–60; pl. LXXXIII, figs. 1, 2). These vases, though later than most from Ialysos, are not later than many of the fragments from Mykenai and Tiryns, and certainly are not archaistic: their importance lies in the locality of their discovery, rather than in the addition which they furnish to our knowledge of the Mykenaian style. The Mykenaian style is older than the geometric, but the ethnological connections are not yet clear. Dümmler and Studniczka give reasons for regarding the geometric style as proto-Hellenic, and the Mykenaian as foreign or pre-Hellenic: they both follow Köhler in assigning a Karian origin to the Mykenaian civilization. The author, looking at the question from the point of view of the palaeoethnologist, unencumbered by literary tradition, maintains that the Mykenaian style of pottery had its origin in some family of the people whose remains we find in Hissarlik, in Kypros, and in the Kyklades, at a time when these people were in connection with Egypt and the East; perhaps Krete, rather than the Kyklades, or Kypros, was a centre of production. With the geometric vases at Mykenai we have an absolute break in the traditions; in the "Mykenaian" tombs the weapons

are of bronze, and burial is practised; with the geometric vases are associated fibulae, iron weapons, and incineration. Every thing seems to point to the conclusion that the geometric style was Greek, introduced by Greek conquerors. Hence the Mykenaian style cannot have been Greek. With the geometric style begins the organic development of Greek pottery. There is also an Asiatic geometric style, distinguished from that of the Greeks by the use of larger concentric circles and of white, the Greek being marked by the use of small circles and tangents. The existence in Greece and Asia Minor (Karia) of allied geometric styles, combined with fibulae and incineration, will, if confirmed, point to a common origin of their population; but on this point the evidence is not yet in. Wherever we seek for the birth of the Mykenaian civilization, there is no evidence that points to Karia for it, and the story of the Karian occupation of the islands lacks trustworthiness.—W. M. RAMSAY, *The Cities and Bishoprics of Phrygia*, Part II (pp. 461–519; map). This study, with Part I, enumerates every Phrygian *polis*, i. e., district which had a self-centred municipal existence, with many villages and towns belonging to the *πόλεις*. The principles on which the survey was made are stated in full. Besides identifying over eighty cities, the author fully discusses the Byzantine division of Phrygia into two provinces, and the Phrygian pentapolis. Several inscriptions are published, and numerous observations on many topics are made. The nature of the article makes a summary of its contents impossible.—NOTICES OF BOOKS (pp. 520–40). (A) Art and Manufacture. POTTIER and REINACH, *La Nécropole de Myrina* (W. W[ayte]); ZANNONI, *Gli Scavi della Certosa di Bologna*, and BRUNN, *Ueber die Ausgrabungen der Certosa von Bologna zugleich als Fortsetzung der Problemen in der Geschichte der Vasenmalerei* (J. E. H[arrison]); FURTWÄNGLER and LÖSCHKE, *Mykenische Vasen* (C. S[mith]); HEYDEMANN, *Jason in Kolchis*, *Elftes Hallisches Winckelmannsprogramm* (J. E. H[arrison]); ROBERT, *Archäologische Märchen*, and URLICH, *Über griechische Kunstschriftsteller* (E. A. G[ardner]); ROBINSON, *Descriptive Catalogue of the Casts from Greek and Roman Sculpture: Boston Museum of Fine Arts* (W. M. R[amsay]); DE RONCHAUD, *Au Parthénon*, and COLLIGNON, *Phidias* (W. C. F. A[nderson]). (B) Inscriptions. KIRCHHOFF, *Studien zur Geschichte des griechischen Alphabets*, fourth ed. (E. A. G[ardner]); ROBERTS, *Introduction to Greek Epigraphy, Part I.* (C. T. N[ewton]). (C) History and Antiquities. STUDNICZKA, *Beiträge zur Geschichte der altgriechischen Tracht* (E. A. G[ardner]); HELBIG, *Das Homerische Epos aus den Denkmälern erläutert*, second edition (W. L[eaf]); P. GARDNER, *Catalogue of the Greek Coins of Peloponnesus* (W. W[ayte]); HAVERFIELD and JORDAN, *Topographical Model of Syracuse* (P. G[ardner]).—INDEX to vols. I–VIII, edited by A. H. Smith (matters grouped according to authors,

subjects, classical authors, and inscriptions) followed by rules of the Hellenic Society, lists of officers, members, and subscribers, *etc.*: minutes of the meetings of Oct. 21, 1886; Feb. 24, April 21, June 23, 1887; treasurer's report.

J. H. WRIGHT.

MITTHEILUNGEN DES K. DEUTSCHEN ARCHÆOLOGISCHEN INSTITUTS. ATHENISCHE ABTHEILUNG. Vol. XII. No. 3.—A. CONZE, *Teuthrania* (pls. iv, v; 4 cuts). The site of the ancient town, as was believed by Karl Humann, is probably upon a hill which rises from the valley of the Kaikos to the right of the river's course about half-way between Pergamon and the sea (Strabo, XIII. 615; XII. 571), at whose foot lies the modern village of Kálerga. Conze's investigations of ancient remains there were made in November 1886. The general line of the ancient pre-Roman ascent can be made out, and a part of its retaining-wall with some pavement was found. On the highest peak of the hill, too, are traces of a fortified settlement of early date. Remains at the base of the hill in different directions show that there was also a settlement here in Roman times. All this corresponds with what is known of Teuthrania from other sources.—W. REGEL, *Abdera*. The exact site of the town of Abdera, which has heretofore been uncertain, is shown clearly to have been upon Cape Bulustra which lies nearly midway between the present mouth of the Nestos and Lake Bistonis, now called Buru-Göl.—J. H. MORDTMANN, *Inscriptions from Bithynia*. These number fourteen in all. The first four from Nikomedia record restorations of private burial-places, and the will of the owners in regard to them. Nos. 7 and 8 are decrees from Prusias ad Hypium: the former contains the new epithets Ὀλύμπιος and δημοσώστης; the latter is interesting as recording the coming of Caracalla and also of his father Septimius Severus to Prusias. No. 9, also from Prusias, is a dedicatory inscription; Nos. 10 and 11 are epitaphs from Claudiopolis. No. 12, from Düzdsche, is a dedicatory inscription, and No. 13, from Amassra, records the erection of an altar by the φυλή Δημητρίας. No. 14 is an epitaph from Biledjik with some noteworthy proper names.—KONRAD WERNICKE, *Pausanias and the Ancient Temple of Athena*. The passages from Pausanias, especially that relating to Athena Ergané, are discussed, and Dörpfeld's attempted interpretations (*Mittheilungen*, XII, p. 52 ff.) confuted.—W. DÖRPFELD, *The Ancient Temple of Athena on the Akropolis*. This is the author's third article upon this temple, and the reply to the objections raised by Eugen Petersen, *Mittheilungen*, XII, p. 62 ff. It is sought, first, to identify the Parthenon with ὁ νεὸς τῆς Ἀθηνᾶς τῆς Πολιάδος of the inscriptions, which is to be distinguished from ὁ ἀρχαῖος νεὸς τ. Ἀ. τ. II. Further, this latter is not the Erechtheion but the Ancient Temple of Athena; a view which was set forth in the second essay and is

here supported by additional reasons. The conclusion is accordingly reached, that the chief centre of the worship of Athena Polias on the Akropolis before the Persian Wars was the newly discovered temple; after that time it was the Parthenon. Previous to the Persian Wars, there was but this one temple on the Akropolis, and near it "within the *τερόν* of Athena" was a small temple dedicated to Erechtheus (Poseidon). The history of The Ancient Temple of Athena is then given at length, and a few replies to Petersen's objections are made. Noteworthy is Dörpfeld's change of view in regard to the difficulty of the Porch of the Maidens being hidden by the ancient temple. He now believes that, when the Erechtheion was planned, it was intended that the ancient temple should be removed, but that, like the "best laid plans o' mice and men," this intention came to naught. The object in building the Erechtheion was to have a temple fit to compare with the Parthenon, which should be the home both for the ancient *ἑόραον* of Athena and for the cult of Erechtheus. Along with the *ἑόραον*, other objects of interest were transferred from the ancient temple to the Erechtheion. Dörpfeld does not think that Wernicke's article just noticed weakens his position.—J. SIX, *A Portrait of Ptolemaios VI Philometor* (pls. VII, VIII; 1 cut). This is a discussion on a granite head found in 1842 under water in the harbor of Aigina. A hitherto unread hieroglyphic inscription upon it is deciphered, and the head is identified as a portrait of Ptolemy VI Philometor. A coin now in Paris stamped with the king's head is used in comparison (Poole, *Brit. Mus. Catal.*, pl. 32. 8). It is suggested that the granite head may have come from the sanctuary of Isis at Methana (Pausanias, II. 34. 1).—FR. WINTER, *Vases from Karia* (pl. VI; 14 cuts). After a few remarks upon a nekropolis about three hours S. E. of Halikarnassos in which the graves bear a strong resemblance to those of Assarlik (*Journ. Hell. Stud.*, VIII, 64 ff.), the author discusses two vases found at Stratonikeia, the Old Karian Idrias, one of which with the figure of a bear upon it is of paramount interest. In what category, then, are these vases and those found at Assarlik to be placed? The Assarlik vases are in their origin Greek, though it may be deemed uncertain whether they were of foreign or domestic manufacture. The earthen sarcophagi which were found with these vases show, at any rate, Phoenician influence. So also do the two vases from Stratonikeia, though the more important one was almost certainly made in Karia. Its resemblance to Kypriot geometric vases is, however, so strong, that the possibility of Phoenician importation is not entirely shut out. Here follows a short discussion of the Phoenician element in Kypriot vases. The study of the vase from Stratonikeia merely shows that Karian art from the IX to the VII centuries B. C. felt the influence of Phoenician work; it does not help us in the question as to whether Mykenanian vases have a Karian origin.

Finally, the view of Studniczka that Assarlik is the first nekropolis of colonists in Asia Minor is advocated.—A. E. KONTOLEON, *Inscriptions from Asia Minor*. These number thirty-six in all, and are from the following places: Nos. 1–13 from Smyrna; No. 14 from Makronesi near Smyrna; No. 15 from Poroselene; Nos. 16–17 from Magnesia ad Sipylum; No. 18 from Thyateira; Nos. 19–20 from Maionia; Nos. 21–27 from Philadelphæia; No. 28 from Balatzikios, a village on the railway between Ephesos and Tralleis; No. 29 from Adana in Kilikia; Nos. 30–31 from Pompeiopolis in Kilikia; Nos. 32–35 from Samos; No. 36 from Prousa. All are, for the most part, epitaphs, dedicatory and honorary inscriptions. No. 2 is in eligiac verse. Note in No. 16 the expression *ἐκ βυθῶν*. In No. 18 are mentioned οἱ λανάριοι = the guild of workers in wool. No. 22 furnishes the apparently new epithet *Ματνηρή* for the goddess Kybele. No. 36 records a probable siege of Prousa by Mithradates.—MISCELLANIES. A. M. FONTRIER, *A metrical inscription from Erythrai*. On a marble base; probably as early as the second century B. C. Noteworthy is the mixture of Ionic and Doric dialectic peculiarities, and the occurrence of the new word *νυκτιμανίς*.—LITERATURE and DISCOVERIES.

No. 4.—A. MILCHHÖFER, *Account of Antiquities in Attika* (contin.) (pls. ix, x; 2 cuts). This portion of the author's compilation includes Nos. 143–495. Under the continuation of heading *A* (*First Section*) of the last article, antiquities from the following places are noticed: Markopoulo (Merenda, etc.), Kalyvia, Kouvara and the neighborhood, Keratea. Under heading *B* (the Paralia as far as Laurion) are reports from: Velanidésa, Vraona, Porto Rafti, Kaki Thalassa, Daskalió Vromopoussi, Thorikos, Laurion, Sunion, and the region of Anávysso and Olympos. The *Second Section* includes the region of Pentelikon, Diakria, the region of Parnes, the neighborhood of Eleusis, the region of Koundura, and the Plain of Athens. Under heading *A* are reported antiquities from: Pentelikon, Draphi, Kalisia, Pikermi, the Monastery of Penteli, Xylokerisa, Vraná, Ninoi, Marathona, Beï, Suli and neighborhood, the region of Marathon. Heading *B* comprises the Diakria from Pentelikon to Oropia: Dionysos (recent excavations of the American School), Kokkino Choráphi, Stamáta, Koukounarti, Bougiati, Spata, Lióssia, Kapandriti, Masi, Varnáva, Rhamnous, Valley of Limiko, Hag. Paraskevi, Hag. Iohannis, Kato-Livadi, Kalamo, Markopoulo, the Monastery of Zoodochu. Heading *C* comprises the region of Parnes: Kakosialesi, Tatoï, Baphi, Varibopi, Chassia, the Monastery of the Panagia *σὺν κλειστό*, the Grotto of the Nymphs on Parnes. Heading *D* comprises the region of Eleusis (not Eleusis itself) from the Thriasian Plain to Kithairon: Kalyvia, Magoula, Mandra, Palaeochora.

The antiquities reported consist of inscriptions (largely sepulchral, terminal, and dedicatory), together with some interesting reliefs (see Nos. 181,

260). Inscriptions and monuments already known are carefully assigned to their respective positions in the topographical scheme. Slight corrections to the *Karten von Attika* are made in Nos. 143, 190.—W. JUDEICH, *Pedasa*. This is an attempt to identify as the remains of the ancient town of Pedasa (see especially Herod., i. 175; Pliny, v. 107) certain ruins which lie upon a hill somewhat inland about twenty kilometers nearly due east from Budrum (Halikarnassos). Though the sea is visible from the hill, the real advantage of its situation is in the fact that the position commands the fertile plain in which lies the modern village of Karowa. The ruins show that there was a settlement upon the hill as early as the v century B. C., and that in Hellenistic times the hill was extensively fortified. The history of Pedasa is discussed, with the conclusion that the site assigned to it must be the correct one.—H. G. LOLLING, *Reports from Thessaly*. This, the author's eleventh and last report, is concerned solely with sepulchral inscriptions from the following places: Larisa and the neighborhood, Turnawo, the region of the Epistasia of Zarkos, Trika, Aiginion, Phalorea, Gomphoi, Pagasai. The inscriptions number sixty-two, nearly all hitherto unpublished.—H. G. LOLLING and P. WOLTERS, *The Monument of Eubulides* (1 cut). In part first of this article, Lolling discusses the question as to whether certain remains found in the region of the Peiræus-Ry. Station are to be identified with the ἀνάθημα καὶ ἔργον of Eubulides mentioned in Pausanias i. 2. 5. The conclusion is that the identification is impossible, and that hence the remains are of no value in the dispute touching the point whence Pausanias begins his description of Athens. In part second, Wolters treats of the head and torso which Ross (*Arch. Aufsätze*, i, p. 146; 6. 149) believes to be those of the Athena in the ἀνάθημα of Eubulides. The conclusion is that the two parts certainly belonged to quite different statues.—F. STUDNICZKA, *The bronze head in the "Musées d'Athènes, pl. XVI."* In the above-mentioned publication it is incorrectly stated that this head was found upon the Akropolis during the excavations of 1882. It was in reality brought to light about 1866 by diggings for the foundations of the Akropolis Museum. The author of the present article, nevertheless, believes the head to belong to a statue destroyed at the time of the Persian occupation. Its resemblance to the head of the Apollo from the west pediment of the Temple of Zeus at Olympia is noticed, and its distinctly non-Attic character is emphasized. The theory of Loescheke (*Dorpat. Programm*, 1887) that the head is *Nesiotic* is rejected, and it is assigned, according to the writer's theory in regard to the pedimental sculptures at Olympia, to the Argeio-Sikyonian school. As the possible sculptor of such a work of art, Hagelaidas is suggested.—FR. WINTER, *A Vase from Mylasa* (pl. xi). This is a *pelike* (see Jahn, *Vasenkunde*, pl. i. 38) upon which, in red-figured technique, is represented a bearded Skythian mounted, and engaged in combat with a griffin.

Vases of similar form and style with representations of this class of scene upon them are of Athenian manufacture. Commonly, however, an Amazon opposes the griffin. The vase under consideration is important as adding to the scanty evidence we now have of an Athenian export trade with Karia. —PAUL WOLTERS, *Apollo and Artemis, a relief in Sparta* (pl. xii). This relief, which was found in 1885, represents Artemis pouring out a drink for Apollo Kitharoidos. Below is figured the omphalos, on either side of which stands an eagle, according to the myth. The *motif* of the eagles probably has its origin in the two golden figures of eagles which we are told were set up in the temple at Delphoi to commemorate the events of the myth. These golden eagles, we may believe, were stolen when the Phokians despoiled the temple; and this together with the fact that representations of them do not occur in works of art which portray the omphalos, with the single exception of a stater of Kyzikos (Head, *Historia Numorum*, p. 453), leads the writer to the conclusion that any work of art upon which the eagles may appear must be older than the middle of the IV century B. C. In the case of the relief in hand, this opinion is strengthened by a comparison of its style with that of the figures in the balustrade of the temple of Athena Niké. The Artemis shows a strong resemblance to figures *M* and *N* in Kekulé, *Reliefs an der Balustrade*. A further likeness may be traced between the Artemis and the armed Aphrodite of Epidauros (*Εφημερίς Ἀρχαιολογική*, 1886, pl. 13), which itself stands in close relation to the Aphrodite of Fréjus, commonly known as the *Venus genetrix*. This latter statue is doubtless the copy of a very celebrated work of art the influence of which was far-reaching. Since, therefore, its influence may be traced in the work of art before us, its date must go back into the V century B. C. The view, therefore, that the original of the Aphrodite of Fréjus can be a work of Praxiteles (Brizio, *Bullettino*, 1872, p. 104; Reinach, *Revue Archéol.*, 1887, p. 250 f.) cannot be a right one. That it was the work of Alkamenes is much more likely. —MISCELLANIES. H. G. LOLLING, *An Inscription from Delphoi*. A few additions and corrections are made to the sepulchral inscription of Archedamos of Selinous published by H. Pomtow, *Sitzungsberichte der Berliner Akademie*, 1887, p. 707. —LITERATURE and DISCOVERIES. J. R. WHEELER.

Vol. XIII. No. 1.—C. SCHUCHHARDT, *The Macedonian Colonies between the Hermos and the Kaikos* (3 cuts). The five chief Macedonian colonies in the Hyrkanian plain are Thyateira, Nakrasa, Apollonis, Mostene, and Hyrkanis. Their positions are here determined. They were probably founded by the Seleukidai as a protection against the Gauls who entered Asia 277 B. C.. Apollonis afterwards became part of the Pergamene kingdom, and was probably named by Attalos II after his mother. It was, apparently, previously called Doidye.—TH. MOMMSEN, *Relief from Kula*

(cut). A rude relief from Kula (near Philadelphieia in Lydia) is published. A mounted warrior is riding toward a female figure called Γερμανία. An inscription declares the whole place sacred: Γαίῳ Γερμανικῷ αὐτοκράτορι Καίσαρι. Probably the Emperor Gaius, not the son of Tiberius, is meant.—C. HUMANN, *The Citadel of Tantalos in the Sipylos* (pl. I; 7 cuts). The Sipylos proper is that part of the Sipylos range which rises above Magnesia. The throne of Pelops and the citadel of Tantalos must be sought above the sanctuary of Kybele (Paus., v. 13. 7), *i. e.*, near the so-called Niobe. On an almost inaccessible height were found, at a distance of about 500 met. from the Kybele relief, remains of rock-cut houses and two tombs, besides an excavated place on the summit of the ridge. This last is taken to be the place of the throne of Pelops.—C. CICHORIUS, *Inscriptions from Lesbos*. 62 inscriptions are published. No. 1 is a more correct copy of the list of property published in the *Bulletin de Corr. Hell.*, iv, p. 415–22. No. 2 is part of a similar list. The rest are sepulchral and votive inscriptions, fragments of decrees, *etc.* Most of them belong to Roman times, a few to the Macedonian epoch.—W. JUDEICH and W. DÖRPFELD, *The Sanctuary of the Kabeiroi near Thebes* (pl. II; 5 cuts). I (Judeich). The position of the temple in a small valley about three miles in a direct line nearly west of Thebes corresponds exactly with Pausanias (ix. 25 f.). The position of other points mentioned by Pausanias is ascertained. II (Dörpfeld). The temple stood on the right side of a small valley where it is joined by a smaller valley. Beside the temple a few walls were found. The temple was thrice rebuilt. Of the oldest temple little remains except part of what seems to be the foundation of an apse. It is built of polygonal limestone blocks, and belongs apparently to the sixth or fifth century B. C. The Macedonian temple, built probably soon after Alexander destroyed Thebes in 335 B. C., was apparently an Ionic *prostylos tetrastylos*. Behind the pronaos was a front cella 4.76 met. wide and 4.37 met. deep, behind this the main cella 4.76 met. wide and 6.10 met. deep, and behind this a room about 4.80 met. wide and 6.82 met. deep which was probably used for sacrifices. The Roman temple was Doric, and slightly wider than its predecessor. It had no front cella, but the main cella was about 9½ met. deep, and the pronaos about 5 met. In the rear or western room were found two trenches framed in stone: these were to receive sacrifices.—W. DÖRPFELD, *The Stoa of Eumenes in Athens*. The stoa of Eumenes is shown to have been to the west of the Dionysiac theatre extending toward the Odeion of Herodes, not to the south of the theatre in the precinct of Dionysos. This agrees with Vitruv., v. 9. 1.—MISCELLANIES. H. G. LOLLING, *Inscription from Pharsalos*. A votive inscription to Zeus Soter is published.—PAUL WOLTERS, *Archaic Inscription from Boiotia*. The inscription reads Σοῦριςβροτος in archaic characters. It was found not far from the temple

of the Kabeiroi.—PAUL WOLTERS, *Fragment of an Attic Vase* (cut). This fragment is in the possession of H. Schliemann. Part of the figures of Athena and Hephaistos is preserved. Hephaistos has an inscription. He holds a hammer and a drinking-cup. Athena has helmet, gorgoneion, and spear. The figures are red, in the style of Euphronios.—LITERATURE.—DISCOVERIES. Report on the discoveries of architecture, of sculptures in stone, marble, and bronze, and of inscriptions made on the Akropolis at Athens in April and May: also on excavations at the Temple of the Kabeiroi near Thebes, at Ikaria, and at Mantinea.—REPORT of meeting of March 28.

HAROLD N. FOWLER.

REVUE DES ÉTUDES GRECQUES. T. I. No. 2. April-June, 1888.—

Address by M. JULES GIRARD, President of the "*Association pour l'Encouragement des Études Grecques en France*," made at the General Assembly, April 5.—Report of M. PAUL GIRARD, Secretary, on the works and prizes for the year 1887-88. Prizes are accorded to M. HOMOLLE for his two works: *Les archives de l'intendance sacrée à Délos*, and *De antiquissima Dianae simulacris deliæis*. While classifying his material in view of a general work on the results of his long and successful excavations at Delos, M. Homolle is publishing some special studies of which these two are examples. The former relates to the administration of the great sanctuary in all its details of property and government, as set down in the inscriptions that formed the public archives. The second study is on the series of archaic statues of Artemis offered in the temple as ex-votos and found by him, the earliest of which dates from the beginning of the VII cent. B. C.—PAUL MONCEAUX, *Legend and history in Thessaly*. In view of the great variety and the opposite character of the myths that have originated in Thessaly, as well as their great importance, the writer seeks to classify them under the heads of the different races which in early times had their origin or their residence in Thessaly, "whence issued forth almost all the Hellenic tribes, each leaving something of itself in the constitution and imagination of the people." From lack of space we can give here only the result of his researches, which are embodied in the table on the opposite page. This table shows three distinct groups—that of the Pelasgians, that of the four Hellenic tribes, that of the Thessalians. A picturesque account is then given of early Thessalian mytho-history; of Pelasgic Thessaly; of the Hellenic invasion, led by the Aioliens, when their three tribes occupied separate regions of the country.—A. CROISSET, *The veracity of Herodotos*. This article is in answer to Prof. Sayce's well-known attack. It bears upon two or three main points: his visit as far as Elephantine in Egypt, and Babylon in Asia—denied by Sayce. The writer attempts to show, that the arguments adduced against Herodotos have no foundation; that the denial

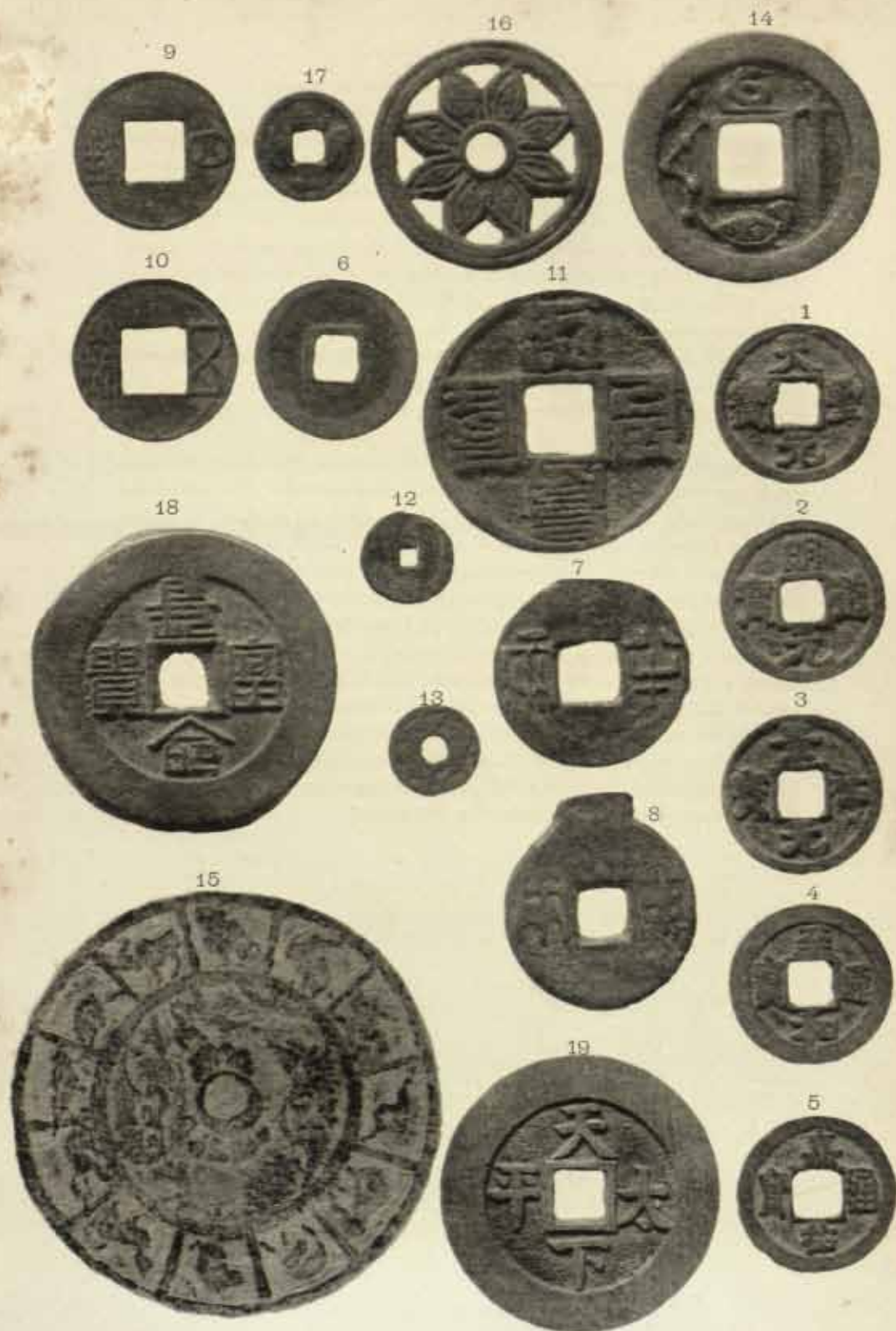
of his visit to Babylonia rests on textual errors; that the affirmation of the destruction of the temple of Bel by Xerxes, being made only by a writer who lived six centuries after the supposed event, and that incidentally, is no proof at all. In regard to Elephantine, the writer dismisses, as puerile, two charges, that Herodotos did not sufficiently praise the monuments of Thebes, which he passed on the way, and that he could not, as he asserts, have questioned the people of Elephantine regarding the region of the Upper Nile, as his notes on this subject are inexact. The third charge, that he calls Elephantine a city, whereas it is an island, the writer settles by showing

Legendary cycles of Thessaly	Principal heroes	Patron deity	Geographical domain
Pelasgic cycle	The Titans The Aloadae Prometheus Ixion The Kentauroi Cheiron	Zeus Olympios	Mount Olympos and Mount Ossa
Aiolian cycle	The Lapithai Kaineus Peirithoos	Athena Itonia	The plains of Kierion and of Larissa
Iono-Minyan cycle	Aison Pelias Jason	Poseidon	Magnesia and Pelion
Achaian cycle	Peleus Achilleus Phoinix Philoktetes Protesilas	Zeus of Dodona	Mount Othrys and Phthiotis
Dorian cycle	Herakles Admetos Daphne Kyrene Aristeas Altaion Koronis Asklepios	Apollon	The valley of Tempé and the road to Greece
Thessaliot cycle	Peneios Aleuas	The river Peneios	The valley of the Peneios

from Strabo and Arrian that a considerable city existed on the island.—
 TH. REINACH, *The Strategoi on Athenian coins*. Athenian silver coins of the new style, i. e., of the Macedonian and early-Roman period, have on the reverse, besides the inscription ΑΘΕ, two or three proper names. The earliest pieces have the monograms of two names; later, these are represented by their first syllable; finally, they are spelled out. It is universally conceded that these first two names are of annual magistrates, and these were, according to Corsini's theory, today abandoned, the two head archons, or, according to the Beulé theory, generally adopted (cf. Head, *Cat. of Athenian Coins in Br. Mus.*), they were financial officers analogous to the *III viri monetales*

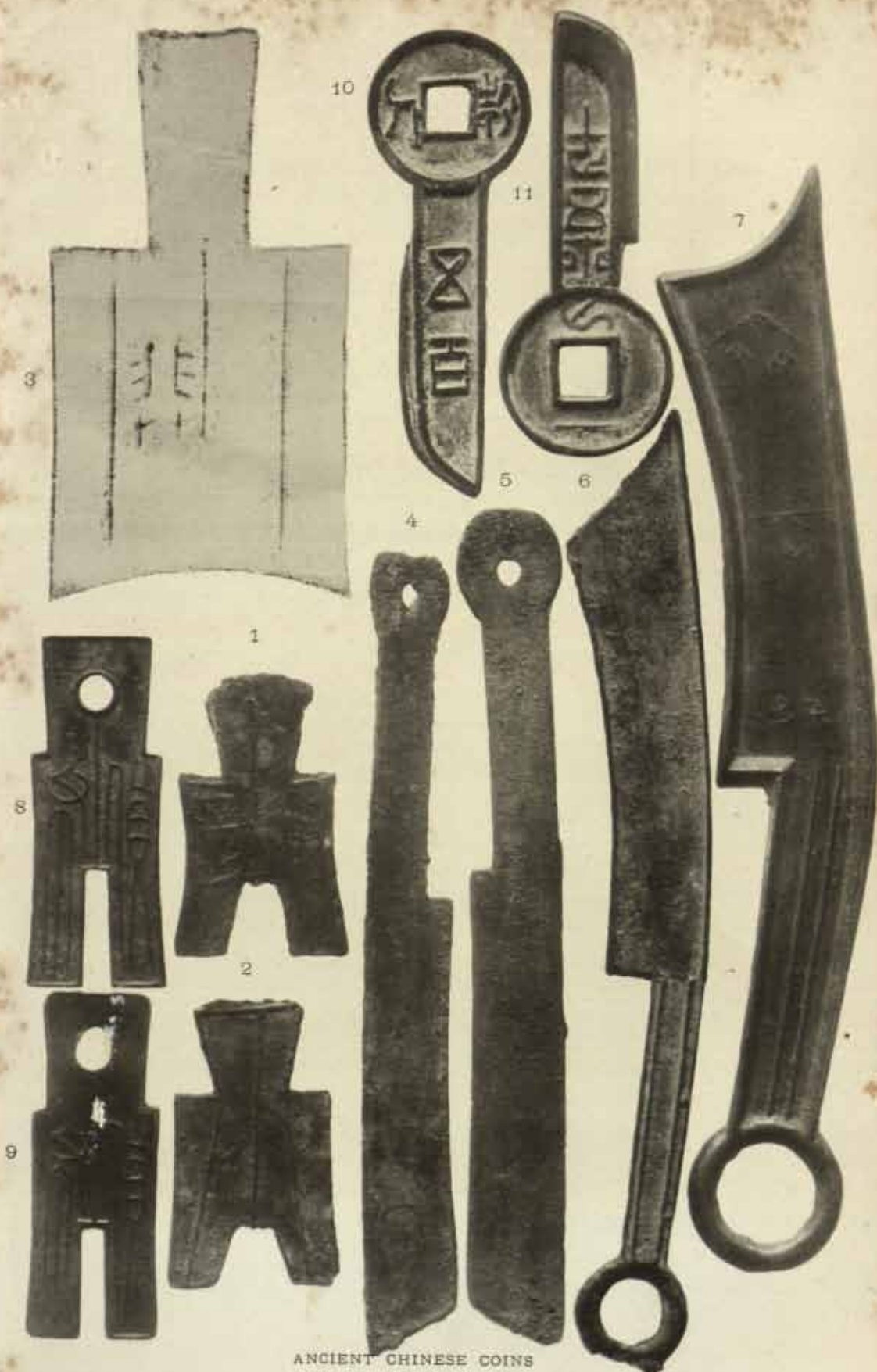
of Republican Rome. The writer proposes a different solution. On all contemporary coins of the Greek cities of Europe or Asia, the name is that of the chief magistrate, which fixes the date of the piece. In the Athenian series, the names of Antiochos Epiphanes, Mithridates, Ariarathes of Pontos and the proconsuls Metellus and Mummius prove the fallacy of Beulé's theory: Reinach sees in the first two names on these Athenian coins the two chief Strategoi. Recent discoveries have proved that during the Macedonian and Roman periods the effective government of Athens rested with the Strategoi, and that the archons lost all political influence, retaining merely some religious and judiciary functions. There were two chief Strategoi, often called *προστάται*, the *strategos of arms* (*στρατηγὸς ἐπὶ τὰ ὅπλα*) and the *strategos of preparations* (*στρατηγὸς ἐπὶ τὴν παρασκευήν*), who resemble Siéyès' *Consul de la paix* and *Consul de la guerre*, and whose attributes seem copied from those of the Roman consuls. The first Strategos gradually increased in authority, and as early as the time of Cicero was the Athenian praetor, a sort of President of the Republic. A comparison with literary texts and inscriptions proves the names on coins to be those of the strategoi. Examples are, (1) the two famous orators of the time of Philip of Macedon, the brothers Mikkion and Euryklides, known to have been the *προστάται* or two head strategoi (*C. I. A.*, II, 858), whose names appear on several tetradrachms; (2) Aristion, who led the fight against Rome in 88, and was proclaimed first consul or *στρατηγὸς ἐπὶ τὰ ὅπλα*, and whose name appears on many debased tetradrachms; (3) Diokles of Miletos, a contemporary of Caesar (Plutarch, *Life of Lykourgos*), whose coins are inscribed ΔΙΟΚΛΗΣ ΜΕΛΙ. Other names are Xenokles, Mnaseas, Polycharmos, Herakleitos, Dionysios, Epikrates.

A. L. F., JR.



ANCIENT CHINESE COINS
IN THE COLLECTION OF REV. W. S. ARNOLD.





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THE AMERICAN
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THE JOURNAL is the official organ of the ARCHÆOLOGICAL INSTITUTE OF AMERICA, and of the AMERICAN SCHOOL OF CLASSICAL STUDIES AT ATHENS, and it will aim to further the interests for which the Institute and the School were founded. It treats of all branches of Archaeology and Art—Oriental, Classical, Early Christian, Mediæval, and American, and is intended to supply a record of the important work done in the field of Archæology, under the following categories: 1. Original Articles; 2. Correspondence from European Archæologists; 3. Archæological News, presenting a careful and ample record of discoveries and investigations in all parts of the world; 4. Reviews of Books; 5. Summaries of the contents of the principal Archæological Periodicals.

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REVIEW OF PAST WORK.

It has been the aim of the editors that the JOURNAL, besides giving a survey of the whole field of Archæology, should be international in character, by affording to the leading archæologists of all countries a common medium for the publication of the results of their labors. This object has been in great part attained, as is shown by the list of eminent foreign and American contributors to the four volumes already issued, and by the character of articles and correspondence published. Not only have important contributions to the advance of the science been made in the original articles, but the present condition of research has been brought before our readers in the departments of Correspondence, annual Reviews of various branches (like Numismatics, Biblical Archæology, Greek Epigraphy), and reviews of the more important recent books.

Two departments in which the JOURNAL stands quite alone are (1) the *Record of Discoveries*, and (2) the *Summaries of Periodicals*. In the former, a detailed account is given of all discoveries and excavations in every portion of the civilized world, from India to America, especial attention being paid to Greece and Italy. In order to ensure thoroughness in this work, more than sixty periodical publications are consulted, and material is secured from special correspondents.

In order that readers may know of everything important that appears in periodical literature, a considerable space is given to careful summaries of the papers contained in the principal periodicals that treat of Archæology and the Fine Arts. By these various methods, all important work done is concentrated and made accessible in a convenient but scholarly form, equally suited to the specialist and to the general reader.

PROGRAM OF VOLUME V, 1889.

We are glad to announce that the Journal has been made the official organ of the American School of Classical Studies at Athens, and will thus be enabled to publish a large part of the results of the excavations so brilliantly carried on during the last two years at Thorikos, Sikyon, and Ikaria. Also, Dr. Charles Waldstein has promised a paper on his important discovery, among the recent finds on the Akropolis, of the head of Iris belonging to the slab of divinities from the eastern frieze of the Parthenon, which is in the British Museum. The report of the excavations at Ikaria will include papers on the architectural remains of the shrines of Dionysos and Apollon, the inscriptions, the archaic warrior-slab, the sepulchral stelai, and other pieces of sculpture of different periods. In view of recent acquisitions, especially by the Baltimore branch of the Archaeological Institute, there will be articles, by Dr. Hartwig and others, on a collection of black- and red-figured vases signed by well-known Greek artists, such as Nikosthenes, Xenokles, Epiktetos, Duris, Philtias. The series of papers by Messrs. Clarke and Emerson on Greek antiquities in Southern Italy, already promised, has been delayed, but will soon be commenced.

One change in the present arrangement, to be begun in volume v, will undoubtedly be welcomed by our readers. Up to the present, the book-reviews have not been numerous: it is now proposed to carry out the principle followed in the NEWS and the SUMMARIES: that is, to give a condensed view of the entire field by printing in each issue a large number of notices of the most important books recently published, under the headings, *Oriental, Classical, Christian, Renaissance, and Prehistoric Archaeology*.

The various series commenced in past volumes will be continued: such as those by Dr. Wm. Hayes Ward on Oriental Antiquities, by MM. Müntz and Frothingham on Christian Mosaics. Dr. Ward will publish some Hittite Sculptures; an inedited archaic Babylonian cylindrical object from Urumya; and a paper on the so-called "human sacrifices" on Babylonian cylinders: Mr. Talcott Williams, a note on the Arch of Chosroes. Professor A. C. Merriam will review the late discoveries in Greek Epigraphy, and M. Ernest Babelon the latest publications and discoveries in Numismatics.

The present policy of making the JOURNAL a complete record of contemporary archaeological work, by its correspondence, book-reviews, news, and summaries, will be continued.

NOTICES.

London Athenæum.—We have no hesitation in saying that no other periodical in the English language is so well fitted to keep the student who lacks time or opportunity to read all the foreign journals abreast of the latest discoveries in every branch of archæology.

Göttingische Gelehrte Anzeigen.—No comprehensive account of the most recent discoveries exists, and the new American Journal can do most meritorious work and fill a deficiency which, since the time of Gerhard's death, has been often deplored by every archæologist who had not the good fortune to be at the fountain-heads.

Philologische Rundschau.—We may expect that the American Journal of Archæology will take an honorable position by the side of those already existing in Europe.

Bibliothèque de l'École des Chartes.—As we think it (the American Journal of Archæology) is called upon to render real service, not only in the United States, but in Europe and in France, we take pleasure in announcing it here. The plan is vast and well conceived.

Archivio di Letteratura Biblica ed Orientale (Turin).—Periodicals are divisible into three categories: some have no pretensions to be classed as learned; some pretend to be but are not so in reality; others, finally, pretend to be and really are. The periodical which we announce (*The American Journal of Archæology*) belongs to the last category.

New York Evening Post.—The American Journal of Archæology will not disappoint the hopes of the friends of the science in America. If not well supported, it will be because there is little real interest in America in classical and mediæval archæology.

Chicago Evening Journal.—*The American Journal of Archæology* is alike creditable to the country and to the earnest and scholarly gentlemen who have it in charge, and we are pleased to know that it has already achieved an enviable reputation in Europe.

London Academy.—Mr. J. S. Cotton, at the annual meeting of the Egypt Exploration Fund (London, Dec. 22, 1887), referred to the *American Journal of Archæology* and the *American Journal of Philology*, which he defined as being of a higher order of merit than any publications bearing similar titles in Great Britain.

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AMERICAN JOURNAL OF ARCHÆOLOGY.

VOL. IV.

No. 4.

INEDITED TERRACOTTAS FROM MYRINA, IN THE MUSEUM AT CONSTANTINOPLE.

[PLATES XIV, XV.]

The excavations by the French School at Athens in the necropolis of Myrina were conducted from 1880 to 1882 under the operation of the Turkish law established in 1874,¹ according to which, one third of the discoveries belonged to the finder, one third to the owner of the ground, and the remainder to the Museum at Constantinople.² The latter portion, which we found it impossible to redeem, comprised a large number of good figures, subsequently transferred, not without sustaining much damage, from Smyrna to the Museum of Tchimli-Kiosk.

In my catalogue of the Ottoman Collection, published in 1882,³ I briefly mentioned the most interesting terracottas, purposely refraining, however, from entering into details, as our excavations were still going on. When our work was stopped by the refusal of the Turkish officials to renew our firman,⁴ the necropolis of Myrina was very far from being exhausted, and I believe that whole series of tombs have since come to light. Little, however, will ever be known about them. Demosthenes Baltazzi Bey, inspector of antiquities in the vilayet of Aïdin, has kindly enabled me, from time to time, to give information on the new discoveries in my *Chronique d'Orient*, but systematic excavations

¹ NIKOLAÏDÈS, *Législation ottomane*, t. III, p. 162.

² That law, as is well known, was replaced in 1884 by a much more severe one, which, for the last four years, has almost stopped all scientific excavations in Turkey. Cf. *Revue archéologique*, 1884, I, p. 336.

³ REINACH, *Catalogue du Musée Impérial*: Constantinople, 1882, pp. 74-7.

⁴ POTTIER et REINACH, *La Nécropole de Myrina*: Paris, 1887, p. 16.

ended on the day when the members of the French School left Myrina. Many of the recently discovered terracottas were sent to Tchimli-Kiosk, while others, perhaps the fruit of secret diggings conducted by Greek merchants, have made their way to various collections in Europe. Although it is difficult to get precise information about such matters, few museums having the custom of publishing annual reports, I think the richest set of Myrinaean figures, next to that in the Louvre,⁵ is at present at Tchimli-Kiosk; immediately after come the collections in Athens,⁶ Smyrna (Evangelical School, and several private gentlemen), Berlin⁷ and Karlsruhe.⁸ Vienna and London possess but very few specimens, whilst Boston has recently purchased about thirty.⁹

The great importance of the collections in Paris and Constantinople is due not only to their fullness, but to the fact that they have not been tampered with by over-clever or unscrupulous restoration. Of course, a few of the statuettes in the Louvre did undergo some repair, but, when slight additions of clay were made to them, these were never concealed by artificial coloring or by coating over with dust. Complete terracottas from Myrina are exceedingly rare, and the seemingly perfect ones which issue from dealers' shops, though as a whole perfectly genuine, have almost always been completed in a more or less arbitrary fashion by the addition of missing limbs or attributes (vases, shells, fans, and the like). The beautiful set in the Berlin Museum contains more than one adulterated specimen. It is now a well-established fact, that in many,

⁵ See the *Catalogue* of that collection published by M. POTTIER and myself, Paris, 1886 (838 numbers). This catalogue includes terracottas which were not found during our excavations, but were purchased at a later date; it is, in consequence, more complete than the catalogue appended to our *Nécropole de Myrina*.

⁶ There exist two large collections of Myrinaean figures in Athens: (1) that of the French School, a part of which only, picked out by M. Heuzéy, was forwarded to the Louvre; (2) that of the *Polytechnikon*, lately enriched by important gifts. A *Catalogue* of the latter, hitherto inedited, has been written by M. P. PARIS, member of the French School.

⁷ A most remarkable set; see *Revue archéologique*, 1887, I, p. 103; *Jahrbuch des deutschen Instituts*, 1888, p. 253.

⁸ *Rev. archéol.*, *loc. cit.* I am not acquainted with the private collections in England and Germany; in France, many choice specimens from Myrina belong to MM. Lecuyer, Gréau, Bellon, Feuardent, etc. At least fifty good ones have been sold at the Hôtel Drouot during the last two years. All the works relating to these terracottas are quoted in our *Nécropole de Myrina*; we must now add two important illustrated sale-catalogues (Hoffmann, 1888), and my article on the Knidian Aphrodite in the *Gazette des Beaux-Arts*, February, 1888.

⁹ *The Nation*, Nov. 17, 1887; *Revue archéologique*, 1888, I, p. 87.

nay, in most cases, the terracottas and other funereal offerings were purposely broken when placed in the graves; we have shown that this was certainly the case at Myrina, just as Rayet and M. Haussoullier had proved for Tanagra; and I can only wonder why some archæologists are so unwilling to admit it, as similar practices have repeatedly been noticed, not only in the Hellenic, but in the Keltic and Germanic world.¹⁰

Since the publication of my catalogue of Tchimli-Kiosk, nothing whatever has been done to make that important collection better known to the public.¹¹ Annual reports are, naturally, quite out of the question. Of the very numerous statuettes from Myrina, not a single one has hitherto been published or even described, and the entire collection would perhaps remain inedited for years to come, if I had not contrived, some years ago, to purchase a set of good proofs from negatives taken by a photographer in Constantinople. I have selected four of the finest ones, which have been engraved by M. Dujardin on the two beautiful PLATES (XIV, XV) now under the eyes of our readers.

From both an artistic and an archæological point of view, I do not think that the value of these figures can be too highly praised. My feeling is that, in general, the terracottas from Myrina have not yet been appreciated as they ought to be, in comparison with those from Tanagra. The monotony of the figures from Tanagra (eight out of ten representing a draped female who is standing or quietly moving on), notwithstanding the marvellous grace of some masterpieces among them, places them in a position quite inferior to those from Myrina, in which the variety of motives is one of the most striking features: moreover, many of the latter have a value as reproductions of larger works which have

¹⁰ Here are some references on this point which have not yet, so far as I know, been brought together. Concerning the Hellenic world: *Nécropole de Myrina*, p. 101; RAYET, *Monuments*, II, pl. 77, p. 8; HAUSSOULLIER, *Quomodo sepulera Tanagraei decoraverint*, p. 78; MILLINGEN, *Peintures de vases grecs*, p. III; COLLIGNON, *Catalogue des vases peints*, p. 190; MARTHA, *Catalogue de figurines*, p. x; STEPHANI, *Compte rendu de Saint Pétersbourg*, 1859, p. 4; STACKELBERG, *Graeber der Hellenen*, p. 37; *Bulletin de Correspondance Hellénique*, t. III, p. 128; HEUZEY, *Catalogue des terres cuites*, pp. 34, 166; *Revue archéologique*, 1887, I, p. 84.—In non-Hellenic tombs: *Bonner Jahrbücher*, t. LVI, p. 198; *Revue archéologique*, 1859, p. 763; 1861, I, p. 481; II, p. 162; 1863, I, p. 33; 1864, I, p. 426; II, p. 158; 1866, I, p. 413; 1868, I, p. 169; 1879, II, p. 216; 1882, I, p. 130; *Congrès d'anthropologie de Pesth*, p. 438; *Matériaux pour servir à l'histoire de l'homme*, t. XXI, p. 269. In Bourbonnais and in Berry, it was until lately the custom for the nearest relation to break an earthen vase on the tomb of the deceased (*Matériaux*, t. XXI, p. 342). Cf. PROPERTIUS, *Eleg.* v. 7. 34: *fracto busta piare cado*.

¹¹ The short notices published in the travellers-guides by Rousset and Meyer are merely extracts from my *Catalogue*.

disappeared and are known to us only by these free copies in terracotta. This being so, I earnestly suggest that the greatest possible number of these figures should be made known by phototype, and I venture to express the wish that the *American Journal* shall take henceforth a leading part in their publication. Figures of minor artistic value can, without inconvenience, be combined, on a reduced scale, in a single plate. An appeal to private collectors would certainly not remain unnoticed, and might also prove useful by turning the attention of dilettanti to the most remarkable class of antiquities at present to be obtained in the markets of the Continent.

I must apologize for this very long introduction and now enter upon some details concerning the four figures reproduced on our PLATES.

The first one, on the left of PL. XIV, is a specimen of which two other replicas are known to me, one in the Louvre¹² and the other in the Museum at Athens.¹³ The replica in the Louvre bears butterfly-wings, and it appears as if similar wings were broken off from the figure now in Constantinople. The presence of such wings leave no doubt as to the subject: it is Psyche waiting for Eros, a motive often treated by late Greek art.¹⁴ The beauty of the attitude and the lovely folds of the drapery need not be dwelt upon. The rock where Psyche is sitting must not be explained by any allusion to her sad story, rocky seats being exceedingly frequent both in Bœotian and in Asiatic terracottas.¹⁵ It simply indicates that the seated figure is supposed to be in the open air.

If we possessed a better-preserved replica of our second terracotta figure (PL. XIV), which, broken as it is, remains a marvel of grace, we would not be puzzled, as we are, to explain her attitude. Two statuettes, indeed, said to have been discovered at Tanagra, can be compared with this Myrinaean gem, though they differ from it in some important respects. The first of these, now in the collection of Baron Gustave de Rothschild, was published by Rayet with the following comment:¹⁶

¹² *Nécropole de Myrina*, pl. XXIV; *Catalogue*, No. 175.

¹³ P. PARIS, *Catalogue*, No. 678 (inedited).

¹⁴ *Nécropole*, p. 364.

¹⁵ *Un rocher, genre de siège indéterminé et conventionnel dont les coroplastes tanagréens ont fait un fréquent usage* (RAYET, *Monuments*, pl. 82, p. 2). Cf. *Griechische Terracotten*, Nos. 1, 2, 4, 5, 9, 15; HEUZÉY, *Figurines du Louvre*, Nos. 22, 41, 45; *Nécropole de Myrina*, pls. IV, XXII, XXIV, XXVI, XXXIII.

¹⁶ *Monuments de l'art antique*, pl. 82.

La jeune personne tient ses jambes un peu écartées l'une de l'autre, et de la main gauche attire à elle et tend l'étoffe de sa tunique de manière à bien circonscrire le creux formé par sa robe entre ses cuisses. Elle lève le bras droit en le repliant légèrement, et dans la main tient une balle qu'elle s'appête à laisser tomber dans la dépression que je viens de décrire. Les yeux baissés regardent avec attention. . . . Le jeu est tellement simple que nous n'apercevons guère l'attrait qu'il pouvait avoir. Mais il a fourni à l'artiste une pose toute naturelle à la fois et toute gracieuse.

To sum up: (1) the Rothschild figure is not nude; (2) she holds a ball in her raised right hand and seems on the point of letting it fall into her lap. Rayet remarked that it was a rather dull game: perhaps it is not a game at all, but only an attitude.

A second figure of similar character has been lately described by Dr. Froehner in the catalogue of one of Hoffmann's sales:¹⁷ *Jeune tanagréenne assise sur un rocher et tenant une pomme de la main droite levée. Sa main gauche saisit l'himation étendu sur ses genoux et le relève pour ne pas laisser tomber deux autres pommes qu'elle y a déposées. C'est la première fois que nous rencontrons ce motif.*

The two figures above described certainly originate from the same model, but they nevertheless present notable differences due to the addition or omission of attributes. Here is a new instance of the independence and capriciousness which characterize the work of Greek koroplasts. They started from a general type, such as "a seated girl with one hand raised and the other on her lap," and then freely modified her attributes (apples, balls, or the like), her headdress, her costume,¹⁸ without pursuing any definite idea, and only for the sake of variety and elegance. This is a point which must be impressed on all those who study Greek terracottas, and a proof that the consideration of single figures can only mislead if not accompanied by the knowledge of the series to which they belong.

Now, we have here a third and totally different modification of the same type. The figure is nude; her left hand is raised, and, if that hand held an apple or a ball, it certainly would fall on the ground, not into the girl's lap. It is evident that she is not a ball-player, but a

¹⁷ *Antiquités, vente du mercredi 30 Mai 1888*, No. 133, pl. iv. The catalogue bears no writer's name, but the author of those pretty volumes is well known.

¹⁸ M. POTTIER and myself have repeatedly insisted on this: *Nécropole de Myrina*, pp. 135, 265, 272, 273, 280, 326, etc. The first who drew attention to it were, I think, MM. Heuzey and J. Martha.

bather; her left hand probably held a small alabastron, the contents of which she is pouring on her left thigh, while her right hand is held ready to rub the perfumed liquid on her beautiful limbs.¹⁹ This motive at once recalls the type of the *sich salbender Athlet*, so admirably studied by H. Brunn,²⁰ a replica of which has also been discovered in the necropolis of Myrina.²¹ The athlete is standing, but we are acquainted also with female figures, in a sitting or cowering posture, which belong to the same class of *ἀλειφόμενοι*.²² In most of the marble statues, the small vase is probably a restoration, but undoubtedly a judicious one.

Notwithstanding the analogous works just mentioned, the statuette in Constantinople remains an *unicum*; at least, I am unable to recall another figure with precisely the same movement and attitude. I feel convinced that we have before us the replica of some charming work of art relating to the same epoch and style as the *Venus lavans se*, attributed by Pliny the Elder to the Bithynian sculptor Daidalos.²³

It is almost unnecessary to add that the magnificent head placed at the right of our figure, resembling the Bacchus *γυννίς* in the Capitol,²⁴ belonged to a quite different terracotta; we left it in the place rather awkwardly assigned to it by the photographer, thinking that it would be a pity to erase from our plate such a fine specimen.

¹⁹The right hand may also have held a small patera; compare a standing figure in *Catalogue Hoffmann*, 1886, p. 41; see also *Catalogue Castellani*, 1884, No. 641 (*femme debout versant le contenu d'un balsamaire*). FROEHNER has published (*Terres cuites d'Asie Mineure*, pl. x, p. 28; cf. *Catalogue Castellani*, No. 665) a beautiful female figure pouring water in a basin placed beside her on a high tripod. Similar motives occur on bas-reliefs, e. g., CLARAC, *Musée*, pl. 122, Nos. 40, 41, 62; pl. 135, No. 153; *Bullettino archeologico Napolitano*, t. III, pl. I.

²⁰*Annali*, 1879, p. 201; *Monumenti*, vol. XI, pl. 7; cf. LUCY MITCHELL, *A History of Ancient Sculpture*, p. 295. An admirable replica in bronze, formerly in the Pourtales Collection (*Catalogue*, No. 672), recently appeared at the Gréau sale (*Catalogue*, No. 964, p. xxxii).

²¹*Nécropole*, p. 450, pl. xli. 3.

²²Add to the statues published in CLARAC's *Musée*, pls. 601, 602, 626 B (MATZDUHN, *Bildwerke*, No. 793), a small bronze in Berlin (BERNOULLI, *Aphrodite*, p. 381, 1°), and perhaps the engraved gem described by TOELKEN (*Verzeichniss*, p. 136, No. 423), as *Venus sich salbend*. In general, cowering Venuses are rather supposed to have water poured upon them by a nymph or some other person standing behind them and not figured; cf. CLARAC, pls. 345, 627, 629, and, for instances of the group when complete, the Aktaion-sarcophagus (BAUMEISTER, *Denkmäler*, I, p. 37) and the well-known Etruscan mirror (SAGLIO, *Dictionnaire*, fig. 749).

²³Cf. *Nécropole de Myrina*, p. 161, 59 bis; OVERBECK, *Schriftquellen*, No. 2045.

²⁴BAUMEISTER, *Denkmäler*, I, p. 435.

The first figure on PLATE XV belongs to a well-known type,²⁵ that of the *φαινομηρίδες*, sometimes winged like Nike, more often without any divine attributes. This is the most charming replica I have yet met with, though some similar ones are in better preservation. The costume is particularly interesting as illustrating the epithet *φαινομήρις* (*showing the thighs*), bestowed by the poet Ibykos on the Spartan virgins. Plutarch quotes a verse from Euripides, upbraiding them for that singular custom: Γυμνοῖσι μηροῖς καὶ πέπλοις ἀνειμένους; to which he adds, by way of commentary: τῷ γὰρ ὄντι τοῦ παρθενικοῦ χιτῶνος αἱ πτέρυγες οὐκ ἦσαν συνερραμέναι κάτωθεν, ἀλλ' ἀνεπτύσσοντο καὶ συνανεγύμνονον ὅλον ἐν τῷ βαδίζειν τὸν μηρόν.²⁶

In fact, as M. Pottier has well observed,²⁷ that Spartan fashion already appears in one of the most ancient statues we possess, the Nike of Archermos found at Delos,²⁸ a work belonging to the most severe archaic style. It was an expressive scheme for indicating the rapidity of the motion, which would have been greatly impeded by a tight skirt. Spartan girls, devoted as they were to fighting and racing, adopted it from the same motive; and that peculiarity in their dress began by answering a practical necessity (something like the "divided skirt" recently commended by Lady Warburton) before becoming, what it perhaps became in reality and in art, a pretext to objectional coquetry.²⁹

The last figure we are dealing with (PL. XV), clad in an almost transparent garment, is certainly equal in beauty to the former ones, in spite of its sad state of mutilation. The inclination of her head in the direction of the right, together with the attitude of her arm, seems to indicate that she is occupied with some other figure, either an Eros or an animal.³⁰ But these or similar hypotheses are more applicable to the lost original—in round or in relief—than to the terracotta figure itself,

²⁵ *Nécropole*, p. 257; *Catalogue du Louvre*, Nos. 161-69; CARTAULT, *Collection Lecuyer*, pl. c⁵.

²⁶ Plutarch, *Λυκούργου καὶ Νουμῶς σύγκρισις* (ed. Teubner, III, p. 76). Cf. POLLUX, *Onomast.*, VII, 55: Ἐκ τῆς κάτω πέζης παρέφαινον τοὺς μηρούς, μάλιστα αἱ Σπαρτιατίδες ἀσθὰ διὰ τοῦτο φαινομηρίδες ὀνομαζόμεναι. See also BÜHLAU, *Quæstiones de re vestiaria*, p. 79.

²⁷ *Nécropole de Myrina*, p. 358.

²⁸ *Bulletin de Correspondance Hellénique*, 1879, pl. VI.

²⁹ Noch jetzt tragen die Birmaninnen ein den Schenkel beim Gehen entblößendes Gewand, wie einst die spartanischen Mädchen (BASTIAN, *Zeitschrift für Ethnologie*, t. I, p. 89). A similar fashion is well known to have existed in Paris about 1796 (QUICHERAT, *Histoire du Costume en France*, p. 640).

³⁰ Compare the panther beside Dionysos, CLARAC, *Musée*, pl. 123, No. 114, and the dog leaping at the Satyr who holds a hare in his raised hand, *ibid.* pl. 178, No. 169.

which, as I believe, was never associated with another one. I can support my opinion by two sketches from inedited terracottas which I drew at Myrina during the excavations and have caused to be reproduced here by a mechanical process (*Figure 12*). One figure is almost nude, the other is clad with tight-fitting garment. Both are perfectly preserved, are very nearly in the same attitude, both are standing alone. One of them looks to her left, the other to her right, while both extend the right arm. Here again we have a motive, that of a woman standing with her legs crossed, her right arm raised and the left one placed behind her back;³¹ no precise action, no episode of female life is alluded to: it is an attitude, and nothing else. Any other explanation will come to grief when applied to figures of the same series. This may appear



FIG. 12.—*Inedited Terracottas from Myrina.*

a rather dull conclusion. Many archæologists have still to learn the *ars nesciendi*, but the sacrifice it imposes upon our curiosity will be more supportable if we reflect that what we consent to leave unexplained, the Greek artist himself, that is, the modeller of the terracottas, probably neither knew nor cared to know.

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³¹ Cf. *Nécropole de Myrina*, pl. vi, No. 6, p. 298.

AMERICAN SCHOOL OF CLASSICAL STUDIES
AT ATHENS.
DISCOVERIES IN THE ATTIC DEME OF IKARIA.
1888.

In order to secure for the most important results of excavations a speedier publication than can be made in the volumes of the Papers of the School, it has been decided to accept for that purpose the offer of the use of its pages made by this Journal, which has been constituted an official organ of the School.

The excavations on the site of Ikaria, commenced last winter by the School, and the success of which was chronicled in the JOURNAL (vol. iv, pp. 44-46), have been resumed under the direction of Mr. Carl D. Buck, who conducted the former investigations. A first instalment of the epigraphic acquisitions made last winter is presented in the four inscriptions edited in the following paper.

AUGUSTUS C. MERRIAM, }
THOMAS W. LUDLOW, } Publication Committee of the School.

I. INSCRIPTIONS FROM IKARIA.

No. 1.

Public decree of the deme of Ikaria inscribed across the middle of a gable-top marble stele: total height, 0.765 met.; width at bottom, 0.32; width at top, 0.29; height of letters, 0.005.

ΚΑΛΛΙΠΠΟΣ ΕΙΠΕΝ ΕΥΗΦΙΞΘΑΙ ΙΚΑΡΙΕΥΞ
ΙΝ ΕΠΑΙΝΕΣΑΙ ΝΙΚΗΡΑΤΟΝ ΔΗΜΑΡΧΟΝ ΚΑΙ
ΣΤΕΦΑΝΩΝ ΣΑΙΚΙΤΤΟΣ ΤΕ ΓΑΡ ΛΙΚΑΙΑΝ ΕΙΡ
ΕΙΝ ΤΟΝ ΚΗΡΥΚΑ ΟΤΙ ΣΤΕΦΑΝΟΥΣ ΙΝ ΙΚΑΡΙ
ΕΙΣ ΝΙΚΗΡΑΚΑΙ Ο ΔΗΜΟΣ Ο ΙΚΑΡΙΕΥΝ ΤΟΝ Δ
ΗΜΑΡΧΟΝ ΟΤΙ ΚΑΛΩΣ ΚΑΙ ΔΙΚΑΙΩΣ ΤΙ ΔΙΟ
ΝΥΞΙ ΤΗ ΝΕΟΡΤΗ ΝΕΠΟΙΗΣΕΝ ΚΑΙ ΤΟΝ ΑΓΓ
Ν ΑΕ ΠΑΙΝΕΣΑΙ ΔΕ ΚΑΙ ΤΟΥΣ ΧΟΡΗΓΟΥΣ ΕΠΙ Κ
ΡΑΤΗΝ ΚΑΙ ΠΡΑΞΙΑΝ ΚΑΙ ΣΤΕΦΑΝΩΝ ΣΑΙΚΙΤ
ΤΟΣ ΤΕ ΦΑΝΛΙΚΑΙΑΝ ΕΙΠΕΙΝ ΚΑΘΑΠΕΡ ΤΟΝ
ΔΗΜΑΡΧΟΝ

*Κάλλιππος εἶπεν· ἐψηφίσθαι Ἰκαριεῦσιν· ἐπαινέσαι Νίκωνα τὸν
δήμαρχον καὶ | στεφανῶσαι κιττῶ στεφάνῳ καὶ ἀνειπείν τὸν κήρυκα
ὅτι στεφανοῦσιν Ἰκαριεῖς Νίκωνα καὶ ὁ δῆμος ὁ Ἰκαριέων τὸν δήμαρ-*

χον ὅτι καλῶς καὶ δικαίως τῷ Διο|νύσῳ τὴν ἑορτὴν ἐποίησεν καὶ τὸν
ἀγῶ|να, ἐπαινέσαι δὲ καὶ τοὺς χορηγὸς Ἐπικ|ράτην καὶ Πραξίαν καὶ
στεφανῶσαι κιτ|τῷ στεφάνῳ καὶ ἀνειπεῖν καθάπερ τὸν | δῆμαρχον.

Translation.—"On motion of Kallippos, it was voted by the Ikarians to praise Nikon the demarch and crown him with an ivy wreath, and that the herald proclaim that the Ikarians and the Deme of the Ikarians crown Nikon the demarch because he has conducted the festival and contest in honor of Dionysos in a good and proper manner; to praise also the choregoi Epikrates and Praxias and crown them with wreaths of ivy, and that the herald make the proclamation as in the case of the demarch."

Comment.—Like all Attic deme-decrees, with two exceptions (*C. I. A.*, II, 579, 580), this lacks the date by the archon's name, and there is no internal evidence whatever upon which to fix the date. The letters, which are very roughly cut, but with στοιχηδόν arrangement, may be attributed to the fourth century; and, if we take as a criterion the uncertainty in the use of *o* or *ou* to express the spurious diphthong, the date of the inscription is not far from 360 B. C. Cf. *C. I. A.*, II, 54, where, out of twenty cases of spurious diphthong, eleven are expressed by simple *o*, against nine denoted by *ou*, as, for example, τός and τοús, προέδρος and προέδρους. The content of the inscription is very simple, being a decree in honor of the demarch of Ikaria and the choregoi for the proper fulfilment of their duties at the festival to Dionysos, which undoubtedly refers to the Rural Dionysia celebrated in the month Poseideon. The chief importance of this inscription when found was, that it fixed, beyond all possible doubt, the site of the deme of Ikaria; and, though proofs have multiplied since then, it remains the most perfect and complete of all, for this purpose. It is worth noting, that this is the first Attic deme-decree found in which the demarch is expressly honored, though such can have been by no means unusual (cf. Dem. 1318. 64). Another of the Ikarian inscriptions, which will be found below, is also in honor of the demarch.

A point of special interest and importance is the mention, in lines 4 and 5, of the *Ikarians* and the *Deme of the Ikarians* as distinct bodies, though, in the first line, Ἰκαριεῦσιν is used in the general sense of demesmen of Ikaria. It seems highly probable that the *Ikarians* were a gens or noble family, within the deme, which claimed descent from Ikarios, and consequently was treated with special honor and possessed peculiar privileges. A more detailed discussion of this point will be deferred

until the publication of two pre-Eukleidean inscriptions which contain many points bearing on the question.

Boundary-Stones.—One of the most numerous classes of short inscriptions found on Greek soil is that by which boundaries are denoted. Such inscriptions are occasionally cut in the solid rock, as ὄρος Διός on the *Observatory Hill* at Athens, but generally upon a movable stone which can be set up in the soil. These stones, sometimes of cylindrical form but more often roughly cut slabs or blocks, are set up on sacred precincts, as ὄρος τεμένο(υ)ς (*C. I. A.*, i, 508); on burial-lots, as ὄρος σήματος Ὀνησίμου (*C. I. G.*, 535); on roads, as ὄρος ὁδοῦ (*C. I. A.*, i, 527); and on private property, as ὄρος χωρίου Πρωτάρχου (*C. I. A.*, ii, 1068); etc. These boundary-stones were probably in many cases the only records of the ownership of real estate, and, if such property were transferred, the "bill of sale" would be a new boundary-stone replacing the old one and inscribed with the names of vendor and purchaser and the conditions of the sale. The great importance of the boundary-stones in any legal transaction is brought out by the Attic Orators, as in *Demosth. vs. Phainippos*, 1040. 5: καὶ πρῶτον μὲν περιαγαγὼν τὴν ἐσχατιὰν, πλεον ἢ σταδίων οὖσαν τετταράκοντα, κύκλῳ ἔδειξα καὶ διεμαρτυράμην ἐναντίον Φαινίππου, ὅτι οὐδεὶς ὄρος ἔπεστιν ἐπὶ τῇ ἐσχατιᾷ. εἰ δέ φησιν, εἰπεῖν ἐκέλευον αὐτὸν ἤδη καὶ δεῖξαι, ὅπως μὴ ὕστερον ἐνταῦθα χρέος γενόμενον ἀναφανήσοιτο ἐπὶ τῷ χωρίῳ.

To proceed, then, to the inscriptions of this class found at Ikaria.

No. 2.

Slab of greyish stone: height, 0.52 met.; width, 0.23; height of letters, 0.017.

Ο Ρ Ο Ξ Χ Λ Ρ Ι Λ Ν Ε Ν
Α Ν Θ Ρ Ε Ι Λ Ι Κ Α Ι Κ Η
Π Λ Η Κ Α Ι Ο Ι Κ Ι Α Ξ Π Ε
Π Ρ Α Μ Ε Ν Λ Ν Ε Π Ι Λ Υ
Ξ Ε Ι Λ / Ξ Ι Σ Τ Ρ Α Τ Λ Ι
Κ Ε Φ Α Λ Η Θ Ε Ν

ὄρος χωρίων ἐν
Ἀνθρείῳ καὶ κή-
πων καὶ οἰκίας πε-
πραμένων ἐπὶ λύ-
σει Δ[υ]σ[τ]ράτῳ
Κεφαλῇθεν.

Translation.—"Boundary of lands in Anthreion and gardens and house sold, upon condition of equity of redemption, to Lysistratos of Kephale."

Comment.—The form of the letters indicates that the inscription should be referred to the fourth century B. C.

Ἀνθρείφ: This is a name hitherto unknown, and it probably belongs to some locality included within the limits of the deme of Ikaria. It seems quite natural that the rural demes, like our own townships, would contain, besides the principal village or deme seat, a number of small hamlets, the names of which, while familiar to the members of the deme, would be little heard beyond the limits of its territory. Our excavations took place on the site which was undoubtedly the centre of population and the seat of the municipal government. This particular stone, however, was not found *in situ*, but had been brought from elsewhere.

The position of the deme of Kephale, mentioned in the last line, has never been exactly determined, but it lay somewhere in the Mesogaia, probably between Markopoulo and Keratea (*Mittheilungen*, 1887, p. 288).

πεπραμένων ἐπὶ λύσει: This technical legal phrase means that the vendor retains the increase of the property, and has the right to repurchase at the same price at which he sold it. On the other hand, he pays a rent (*μίσθωμα* or *μίσθωσις*) equal in amount to the interest on the money which he received for the property. Thus the whole transaction is practically equivalent to a mortgage loan, with this difference, that in the latter case the party who receives the loan remains (so long as he pays the interest and no foreclosure takes place), both practically and legally, the proprietor, while under the Greek law *ἐπὶ λύσει* the proprietorship was legally vested in the party who gave the loan (as in early English law), although possession remained with the original owner. There was a legal transfer of property, and technically, instead of interest being paid on the loan, rent was paid on the land.¹ To illustrate from our inscription: X. (name of vendor not given) desires to borrow money from Lysistratos, and, instead of giving him security in the shape of a mortgage on his lands and gardens and house and paying interest on the loan, he actually sells this property to Lysistratos, and then rents it of him at a rate equivalent to the interest on the amount which Lysistratos has paid him for it. If he should be sufficiently prosperous, he would be able by the terms of the sale to buy back the property at the same price which he received for it.

Compared to the mortgage system, this process seems complicated, and the difficulties which might arise from it are shown in the oration of Demosthenes referred to in the last note. Pantainetos borrows money from Mnesikles to buy certain mining works, but by way of security Mnesikles is considered the legal purchaser, and holds the rec-

¹ DEM., *Pantain.*: ὑπόθεσις: καὶ ἦν τοῦτο τῷ μὲν ἔργῳ τόκος, τῷ δὲ ὀνόματι μίσθωσις.

ords of the sale (τὰς ὠνὰς), whatever may have been their form. But Mnesikles afterwards demands his money, and, to pay him, Pantainetos is obliged to find new loaners, who purchase the property from Mnesikles and then rent it to Pantainetos at a rate equivalent to the 12% interest on the amount they had paid for it: καὶ τοῦτοις ὑποθήκην δίδωσι τὸ ἐργαστήριον, καὶ τὰ ἀνδράποδα. γραμματεῖον δὲ, οὐχ ὑποθήκης, ἀλλὰ πράσεως γράφεται. The last sentence is rendered by Paley and Sandys:² "And thus the indenture is not a mortgage, but an actual conveyance." One of the several difficulties in the understanding of this oration arises from the fact that, while Pantainetos is practically owner and manager of the mining property, the ownership has never been legally vested in him, but has been continually transferred from one party to another. The process of genuine mortgaging, however, existed alongside the one just described, and we even have boundary-stones inscribed in this fashion, as ὄρος χωρίου τιμῆς ἐνοφειλομένης Φανοστράτῳ Παιαν(ιεῖ)XX (C. I. A., II, 2, 1134).

No. 3.

Fragment of thin marble slab: height, 0.21 m.; width, 0.22; height of letters varies from 0.02 to 0.035.

ΟΞΧΠΙΟ
ΟΙΚΙΑΞ
ΠΑΜΕΝ
/ΞΕΙ:ΧΡ
=ΙΑΙ

ὄρ]ος χωρίο
καὶ] οἰκίας
πεπ]ραμένων
ἐπὶ λ]ύσει·ΧΡ
Πραξ(?)]ία

Translation.—"Boundary of land and house sold upon condition of equity of redemption for 1500 drachmas."

Comment.—The letters may well belong to the early part of the fourth century, and I feel confident that the O at the end of the first line stands alone for the spurious diphthong, though, owing to the fact that the stone is broken at this point, it is impossible to be certain that a Y was not inscribed. The content of this inscription is identical with that of No. 2, except that in this case the amount involved is expressly stated. In the last line the marks before the *iota* may well belong to Ξ, and we may conjecture that the person to whom the property was sold was the Praxias mentioned in No. 1 as one of the choregoi. This, however, must not be considered as more than a mere possibility, as the traces before the *iota* might equally well belong to E.

² *Select Private Orations of Demosthenes*, part I, p. 85.

No. 4.

Block of roughly-cut greyish stone, broken on both sides and at the bottom: height, 0.175 m.; width, 0.31; height of letters, 0.02. It has been published by Milchhöfer,³ who saw it in the wall of the Byzantine church the demolition of which was an important part of the work at Ikaria. By its removal from the wall a few additional letters have become visible, although, by reason of the roughness of the stone and carelessness of cutting, the reading of any part whatever is exceedingly difficult.

■ ΟΞΧ	■ ς	■	δρ]ος χωρ[ίου
■ ΑΙΟΙΚΙΑΞΑΡΟΤ	■	■	κ]αὶ οἰκίας ἀποτ[ίμη
■ ΓΡΟΙΚΟΞ	■ Ρ	■	μα] προικός
■ ΚΕΙΚΛΕΙΞ			
■ ΓΑΙ	■	■ Ο	
■ Ο			

Translation.—“Boundary of the land and house, security for the dowry,” etc.

Comment.—Divorce seems to have been, among the Greeks, an all-too-common occurrence; and it was partially with the idea of giving greater stability to the union, by bringing financial interests to bear upon the question, that a dowry was bestowed upon the bride. The husband had the interest of this dowry to use as he pleased, but, if for any reason separation took place, he was obliged to restore the principal; and on this account it was customary, when the dowry was handed over to him, to require security for it on his own property.⁴ To the numerous class of inscriptions recording such a mortgage belongs the one just given, which is of the fourth century B. C.

That ἀποτίμημα is not necessarily restricted to the security given by the husband, but may also be used for the security given by the bride's father for dowry not yet paid over, has been shown by Dareste,⁵ whose interpretation of the inscription in relation to the dowry of Xenariste seems plainer than that of Köhler. Instead of the simple gen. προικός, we find ἐν προικί,⁶ προικί,⁷ εἰς τὴν προῖκα.⁸

Cambridge, England,
Oct. 23, 1888.

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³ Mittheilungen, Athen., XII, p. 311.

⁴ Cf. HERMANN, Lehrbuch der griech. Antiq., vol. IV, p. 264 ff.

⁵ Bulletin de Correspondance Hellénique, II, p. 485: cf. XII, p. 304.

⁶ DITT., Syll., 434.

⁷ Ephemeris, Nov., 1876.

⁸ DITT., Syll., 437.

AMERICAN SCHOOL OF CLASSICAL STUDIES
AT ATHENS.
A NEW SIKYONIAN INSCRIPTION.



Δ ί ω ν
Κ α λ λ ί [ω ν
Μ ο υ σ ο ς
Ἀ ρ μ ό δ ι [ο ς
Ἐ ρ ά σ ι π π [ο ς
Α ἰ σ χ ί ν α [ς
Ἀ ρ ι σ τ ο κ [λ ἦ σ¹

In December 1887, while I was residing at Kíáto, the chief town (πρωτεύουσα) of the modern deme of Sikyon, during the progress of the excavations at the old theatre of Sikyon, an Albanian peasant named Geórgios Agrapedákes told me that some blocks of stone containing παλαιὰ γράμματα had been found in a field belonging to him in the village of Moúلكi.² On December 18, I went up to Moúلكi in company with my friend Dr. Eustáthios Tournákes of Kíáto, and there we found two blocks of stone, said to have been dug up some three years previously. On one of these the inscription, of which a facsimile is given above, was quite plainly legible. The length of this block is 0.70 m.,³ the same as that of the other, on which there seemed to be traces of letters obliterated beyond the possibility of decipherment. The height of the letters themselves is from 0.02 m. to 0.025 m., the former being that of the O, except in the first line. The stone is of a

¹ These names are all to be found in Pape. Only two are cited as borne by Sikyonians, Aischines (PLUT., *De Her. mal.*, 21) and Aristokles (PAUS., VI. 9. 1; VI. 3. 11). A Mousos is mentioned (PAUS., V. xxiv. 1; OVERBECK, *Schriftg.*, 2080) as the unknown artist of a statue of Zeus set up at Olympia by "the *demos* of the Corinthians."

² Moúلكi (Μοῦλκι) is situated N. W. of Basilikó (the modern representative of the upper town of Sikyon), near the Ποτάμι τῆς Λέχουρας, the ancient Ἐλισσάων. It undoubtedly formed part of the old city before its capture by Demetrios Poliorketes. Cf. DIODOR., XX. 102, 2-4.

³ The thickness of the block is 0.25 m.: the original width cannot be determined.

brownish color, fairly hard and of coarse grain. It is broken on the right-hand side, whence the loss of one or more letters in every word except the first and third. The characters, as will be noticed in the facsimile, are quite neatly formed and arranged nearly *στοιχῶδόν*. I made a copy of the inscription at the time, as did also Dr. Merriam, to whom I exhibited the new find before my return to Kiáto; and, on December 22, I took a squeeze, on which the facsimile is chiefly based.

I will now consider the inscription from an epigraphical standpoint. The reading, as given in the facsimile, is quite certain; but the first and sixth letters in the second name, the seventh letter in the fourth, and the seventh letter in the sixth are somewhat defaced. The inscription, when complete, was apparently as transcribed above.

As regards the characters, we observe: first, the angular form and small size of the *O*, except in the first line (*cf.* Roehl, *I. G. A.*, 27*a* *Add.*); secondly, the four-barred *sigma*; thirdly, the angular form of the *rho*; fourthly, the form of the *chi*, as contrasted with that (+) of the Caere inscription (*I. G. A.*, 22; Roberts, *G. E.*, No. 95); fifthly, the forms of *mu* and *nu*⁴; sixthly, the form $\Sigma = \epsilon$. On this last, special stress is to be laid, as being a point of the greatest importance.

That $\Sigma = \epsilon$ was a form peculiar to Sikyon, is not recognized by Roehl, nor does Roberts lay it down as a fixed principle, while Kirchhoff (*Stud.*,⁴ 104-5) still retains under the head of Corinth the inscription of the Caere vase (*I. G. A.*, 22; Roberts, No. 95), in which this sign occurs four times. I shall endeavor to show that not only have we no proof that the sign Σ was employed in the Corinthian alphabet, but that, in view particularly of the present inscription, the first one found *ipso loco* containing this sign, we seem warranted in assuming that it was peculiar to the Sikyonian alphabet, which appears to have been pretty sharply defined, and to have developed with considerable regularity as well as conservatism.

The fact that no inscription has been found at Corinth, or to be with certainty traced to Corinth, containing this form of *epsilon*, when viewed in connection with the fact that ϵ in the early alphabet of Corinth, as well as in that of her colonies, appears as E° or B (this form being also employed for the η , and ϵ being usually written as E°), goes a long way toward a demonstration of the non-existence of the form $\Sigma = \epsilon$ in the Corinthian alphabet. The proximity of Corinth and Sikyon is nothing in favor of influence one way or the

⁴ *Cf.* *I. G. A.*, 21, 22 (ROBERTS, Nos. 94, 95) with *I. G. A.*, 26*a* *Add.* (ROBERTS, No. 93).

⁵ *Cf.* ROBERTS, p. 134.

other; for Sikyon at least seems to have been conservative in a very high degree.

In this connection, we must, however, admit that too much stress has been laid on the peculiar local form of the name, *Σικυών*. Roehl (*I. G. A.*, 17) claims that the inscription scratched on a spear-head found at Olympia cannot be the work of a Sikyonian, because the early local form of the name was *Σικυών*, and not *Σικυών*, as found in this case: but one is startled to find in the *Addenda* (27a) a spear-head inscription attributed to a Sikyonian, but apparently from the same hand as the last, in which the form $\Sigma = \epsilon$ occurs in the same word. The similarity of the two inscriptions is most striking, notwithstanding this variation, the same unusual pentagonal σ occurring in each, and the forms of the other letters, carelessly made it is true, being essentially the same as those of *I. G. A.*, 17. One is also surprised to notice that Roehl reads 17, *Σικυών*, rightly considering the three parallel scratches at the end as a mark of punctuation,⁶ while he reads 27a *Add.*, *Σικυωνί(ων)*, taking the perpendicular mark after the N—which is taller than any of the undoubted letters—as I, although such a form of *iota* is here, to say the least, in the highest degree improbable. It seems to me quite certain that we should read, here, simply *Σικυών*. The testimony of the coins cannot be adduced in support of any theory of a consistent local employment of the form *Σικυών* in the fifth century at least;⁷ and, indeed, if the two spear-heads were engraved by the same hand, we find here a confirmation of what we may gather from the coins, namely, that the local usage was not at all stable, both forms being used indifferently.⁸ We are then, in my judgment, quite safe in numbering *I. G. A.*, 17, among Sikyonian monuments.

We must, therefore, guard against an assumption of over-conservatism on the part of the Sikyonians, but at the same time must not be led to assume that their alphabet developed with the same rapidity as that of Corinth, a point to be emphasized in estimating the probable date of the inscription now under consideration.

Roberts, who groups together the inscriptions of Corinth and its colonies and those of Sikyon (*G. E.*, pp. 119–37), distinguishes three periods, as follows (pp. 134–5): first, that comprising the most primitive inscriptions, in which *san*, the older form of μ (M), the crooked

⁶ *Lineola quae ad dextram exarata est, non est litterae vestigium, sed finem tituli indicat.*

⁷ Cf. HEAD, *Historia Numorum*, p. 345.

⁸ *Σικυώνισι* is the reading of Fabricius on the serpent-column at Constantinople (cf. ROBERTS, p. 259.)

iota, the closed *spiritus asper*, the older *theta*, certain peculiar forms of *gamma* (C, ζ , l), and remarkable forms to express β and the E-sounds (ξ , B, or Σ^a) appear; secondly, that comprising inscriptions "which exhibit the straight *iota* but retain the *san*" (p. 135); thirdly, that comprising inscriptions marked by, (1) "the adoption of the four-stroke *sigma*," (2) "the gradual substitution of the open H for the closed form," (3) "the introduction of the normal form for β " (p. 135). The first of these periods is to be placed as early as the sixth century B. C., the second would correspond to the earlier half of the fifth century, and the third to the latter half of the same century.¹⁰

In view of the arguments adduced in the course of the previous discussion, we seem justified in attributing to Sikyon both the spear-head inscriptions already alluded to (*I. G. A.*, 17, and 27a *Add.*). In one of these the form $\varsigma = \iota$ appears, and in both we have *san*. These, then, are plainly older than *I. G. A.* 21 and 22, which belong to the same period and are to be assigned to the earlier half of the fifth century. Certainly later than these, again, is our new inscription, between which and those just mentioned I am in favor of dating *I. G. A.* 27c *Add.*, which is, then, probably to be restored: $\Sigma \Sigma K V \Diamond N I \Diamond [N$ or $\Sigma \Sigma K V \Diamond N I \Diamond [I$.¹¹ In both these last we find Σ retained, though in the former we have *alpha* and *kappa* of later form than in any other early Sikyonian inscription, and even later than in *I. G. A.*, 26a *Add.*, a Corinthian inscription commemorating the battle of Tanagra (457 B. C.). In the last-mentioned, however, we have the normal ϵ , and α , ν , and χ of the same form as in our new inscription. In view of the latter coincidence, as well as of the conservatism of the Sikyonians, we need have no hesitation in placing our inscription at least as late as 457 B. C., and probably somewhat later. In fact, I would propose the following chronological classification of early Sikyonian inscriptions:

- I period, latter part of sixth century B. C. (*I. G. A.* 17 and 27a *Add.*);
- II period, first half of fifth century B. C. (*I. G. A.* 21, 22);
- III period, middle and latter half of fifth century B. C. (*I. G. A.* 27c *Add.* and the new inscription).

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December, 1888.

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¹⁰ "X at Sicyon, at least in the 2d period."

¹⁰ For the grounds of this chronology, which seems very satisfactory, see ROBERTS, p. 136.

¹¹ Cf. ROEHL's remarks *ad loc.*

EARLY BRONZES RECENTLY DISCOVERED
ON MOUNT IDA IN KRETE.

[PLATES XVI, XVII, XVIII, XIX, XX.]

The interest of archaeologists and philologists has of late been especially directed toward the island of Kreta, by the discovery of some of those Kretan laws so famous among the ancient Greeks.¹ In these laws, we not only become acquainted with the fountain-head of Hellenic public and private right, but are enabled to seize it in the interesting stages, first, of disconnected fragmentary preparation, and, second, of connected and full development—a great help in analyzing the essence and realizing the growth of the early legislation of Hellas. These discoveries on the site of the ancient Gortyn, with which are connected the names of Fabricius, Halbherr, Comparetti, and other eminent scholars, have led to discoveries more strictly archaeological, which, limited as they are, give great promise for the future.

Now that wellnigh every corner of the classic period of Greece has been explored, the tide of investigation, hurried on by numerous discoveries, is being somewhat diverted toward that unexplored age which from the century before Peisistratos stretches back far into the mists of pre-history. In this search for the origins of Greece, a search poetic but eminently archaeological, whether it treat of myths, legends, migrations, or monuments of art and industry, there is no question so important as that which deals with the place of origin, the character, and the transmission of those elements of national Hellenic life which appear fully constituted in the seventh century B. C. Of all primitive centres of Greek culture, Kreta seems the one most likely to aid in lifting the veil from a period whose monuments are still so few and insufficient. For, as Hoeck remarks (*Kreta*, I *Einleitung*), "the history of Kreta begins at such an early date and the period of its prosperity belongs to so ancient an age, that it was already fallen before the rest of Hellas

¹ Consult A. C. MERRIAM's paper on *The Law Code of the Kretan Gortyna* (*Am. Journal of Archaeology*, I, 325-50; II, 24-45) and the authorities there quoted. Since its publication, other important monographs have appeared from the pens of German and Italian writers.

began to flourish." As an explanation of this early prosperity and development, "back of the heroic period of the Achæians and Atreidai" (p. 127), Milchhøfer says (p. 128): "Krete not only lay at the point of intersection of all the western sea-routes: Krete was accessible not only toward Greece and Asia Minor, but even Phœnicia, Egypt, and Italy were more easily reached from here than elsewhere." And so it became the *rendezvous* for various nations, especially those of Asia Minor, from which, in Milchhøfer's opinion, it was probably colonized. According to the same writer (whose work, *Die Anfänge der Kunst in Griechenland*, is of standard authority so far as there can be any on a subject so obscure and deficient in exact data), we should seek in Krete for the origin of that art the most noteworthy products of which were found by Dr. Schliemann at Mykenai, but which was evidently spread far and wide in the early prehistoric period.² He expects (p. 135) to find the early monuments of Krete divided into two classes, belonging, the first, to the "angular and dry Pelasgic style," illustrated by a number of gems, the second, to the "supple, fantastic, Asiatic art of works in metal."³ But we may go further than this, and may expect to find in Krete the antiquities of the many races that, according to tradition, succeeded each other on the island:—*first*, barbarous remains of those non-Greek autochthonous (?) inhabitants, the "Eteo-Kretans:"⁴ *second*, massive architectural ruins of the Pelasgians and Achæians,⁵ to whom also, under the titles of Daktyloi, Telchines, and Kouretes, we owe perhaps the earliest bronzes, and those potteries judged to belong to a period between 2000 and 1000 B. C., which are found on sites attributed to Telchinean foundation, like Knossos in Krete, Ialysos and

² *Die Kunst des heroischen Blütezeitalters, dessen Schwerpunkt nach Griechenland, vor allem nach Mykenae fiel . . . ist nur die Fortentwicklung einer durch neue, unten näher zu entwickelnde Ausgänge genährten ältern Cultur, welche uns am reichsten in dem Inhalt der mykenischen Burggräber entgegentrat . . . Ich suche deshalb auch den Ursprung der ältesten mykenischen Kunstindustrie zuversichtlich in Kreta, als dem in jeder Beziehung geeignetsten Vereinigungspunkt pelasgischer, phrygischer und orientalischer Elemente* (p. 133). Cf. DUMONT et CHAPLAIN, *Les Céramiques de la Grèce propre*. Prem. partie, p. 79.

³ MILCHHØFER, besides many references to Krete, and the publication of many inedited archaic Kretan gems, devotes an entire chapter (pp. 122–37) to the island.

⁴ The Kretan peoples mentioned in *Od.* xix. 175 sqq. are Achæians, Eteo-Kretans, Kydonians, Dorians, and Pelasgians: ἐν μὲν Ἀχαιοί, ἐν δ' Ἐτεόκρητες μεγάλῃτορες, ἐν δὲ Κόδυρες, Δαρπείες τε τριχάκχευ διόλ τε Πελασγοί.

⁵ For these great Cyclopean city-walls, Milchhøfer (p. 126) refers to PASHLEY, *Travels in Crete*; also Museum of Classical Antiquities; and to SPRATT, *Travels and Researches in Crete*.

Kameiros in Rhodos,⁶ as well as at Mykenai, Tiryns, and Spata; in another branch, also, the prehistoric cut gems which are the product of the early *Inselkultur* under Oriental influence:⁷ *third*, during the later period of Oriental influence, works in the Phoenician style, either imported or executed by the colonies of Sidon, long since established on the island, or by the Dorians themselves, who had succeeded the Pelasgians in Krete several centuries before, and who often came under strong Phoenician influence: *fourth*, we should expect to find works which would show through what stages the Dorians struggled before creating an art thoroughly and originally Hellenic, traces of which are found on the mainland, especially at Sparta. Of the different archæological classes, enumerated above, not all are represented by the few monuments that chance has brought to light, and even these serve but to excite and not to satisfy our desire for knowledge. The Pelasgic gems, which Milchhöfer has so carefully studied in different museums, are but few: the massive "Cyclopean" walls, mentioned by travellers, are probably remains of the ninety walled cities mentioned in the Homeric Epos, but they have never been carefully studied: the early pottery, in the Mykenaiian style, found at Knossos, is limited in extent: the relics of both Phoenician and early Dorian art are but fragmentary.⁸ Nevertheless, it is certain that on Kretan soil we must seek for the origin of that art which, being transferred thence to fellow-Dorians in the Peloponnesos, was the divine spark that first kindled the artistic fire in the inhabitants of the mainland. As the discoveries in Attika, and especially on the Akropolis, have given to us important works of archaic Greek plastic art, dating, apparently, as early as the close of the seventh and the beginning of the sixth century, we may expect to find in Krete genuine Greek products at least a century earlier in date, and, starting from these, a series of monuments of different races and distinct styles extending back over a period of about one thousand years. But, with all this promise, until recently, nothing had been done: not a nekropolis, not even a single tomb,

⁶ DUMONT et CHAPLAIN, *Les Céramiques de la Grèce propre*; première partie, fasc. 1: RAYET et COLLIGNON, *Histoire de la Céramique Grecque*: Paris, 1888.

⁷ MILCHHÖFER, *op. cit.*, figs. on pp. 55, 68, 78, 81, 82, 89, 92.

⁸ Among the most interesting are two bronzes illustrated by MILCHHÖFER in the *Annali* for 1880, pp. 213-22, pls. s. r., under the title *Bronzi arenici di Creta*. They are Dorian works of a style earlier than, though allied to, that of others found at or near Sparta, and are judged to belong to the seventh century, though the plaque is probably a century earlier.

had been scientifically explored on the entire island.⁹ Chance, however, has brought about what science failed to do, and has given us a startling discovery, and this in the centre of primitive Kretan worship, the *Cave of Zeus* on Mount Ida, so familiar in Greek mythology, poetry, and tradition.

In the summer of 1884, while guarding his flock on Mount Ida, Georgios Pasparakis was scratching the earth with a stick within a cave whose soil was abundantly mixed with ashes and charcoal, and thus began the discovery of a great quantity of fragments of terracotta lamps, some pieces of thin gold plates, and a few small bronzes. Following suit, the inhabitants of the neighboring village, Anoja, dug holes and trenches promiscuously on various points in the grotto and its neighborhood, bringing to light antiquities of the greatest variety. This first lot was carefully studied and described by Dr. E. Fabricius in the Athens *Mittheilungen* (vol. x, p. 59 *sqq.*), where he also demonstrated the identity of the grotto with the famous Cave of Zeus. In the spring of 1885, the Syllogos of Candia, which had already started its museum (*cf. JOURNAL*, III, pp. 174-5, 457), attempted to begin excavations on the site, but, on account of the political disturbances on the island, this was at first prevented, and the villagers were again allowed to dig during two or three weeks: this they did most recklessly and tumultuously, and the objects found were of much greater importance than those of the first raid. Fortunately, in August 1885, it was possible to commence regular excavations under Dr. Halbherr and Professor G. Aeraki of Candia. The results have very recently been published, fully and sumptuously, in a volume of the *Museo Italiano di Antichità Classica* (vol. II, punt. iii, 1888), edited by Professor Comparetti. A short paper by Dr. Halbherr containing an account of the discoveries and a catalogue of the objects, and a long and exhaustive monograph by the well-known writer on Italian prehistoric archaeology, Signor Orsi, are accompanied by a superb album of twelve plates of imperial-folio size. The materials for the present study are derived from this text and these plates.

The grotto is divided into two distinct sections. In front is a large atrium 25 met. wide at the mouth and 31 near the middle: its floor slopes sharply inward, leaving, at the further end, a flat platform about 14 or 15 met. square: its vault is 9.50 met. high at the entrance, but rises to a far greater height toward the centre. From the end of this

⁹ *Museo Italiano di Antichità Classica*, vol. II, p. 899.

grotto there opens into the mountain a second and smaller cave, almost completely deprived of light, about 22 met. long, 12 met. wide at the entrance, and over $4\frac{1}{2}$ met. high. "The soil of both grottos is composed in great part of ashes, charcoal, and carbonized matter, among which are many fragments of half-burned bones of animals and crania(?), the remains of sacrifices: similar strata of black earth also extend sporadically throughout the declivity of the larger grotto and its neighborhood, and in it all the objects were found. On either side of the entrance to the large cave there projects from the mountain an immense mass of rock, and, in the recess formed by that on the left, rises the imposing altar for sacrifices. It is cut in a rock of great size, fallen there probably in prehistoric times: the upper part, the real *βωμός*, is in the form of a rectangle 4.80 by 1.95 by 0.88 met., encircled, at a height of about 3 met. from the ground, by a platform 1.45 met. in width, which overlooks the entire scene. In front of the grotto is a large esplanade, of the same width and about 75 met. long, the soil of which, also, was full of antiquities. On the neighboring heights on the N. and N. E. are some large blocks of local calcareous stone which were apparently used, in Halbherr's opinion, as bases for bronze statues or other large votive offerings (see Plan of Cave in *tav. XII* of volume II, *Museo Italiano*).

About two-thirds of the ground in front and one-half of that in the interior had been upturned by the peasants before the regular excavations began. Fortunately, the inclined plane in the outer cave had not been touched, and in it were found the greater part of the precious works in plate-bronze—the shields, paterae, lebetes, etc. "The quantity and variety of the material discovered is such as to well accord with the deep veneration in which this cave was held, being consecrated to one of the principal myths of the Kretan religion and of the Greek religion in general, and being placed, as it is, in the centre of the island at about equal distance between the great cities Gortyn and Knossos. . . All the objects either served for worship . . or were votive offerings . . and, except sculptures in marble and stone, there is hardly a branch of ancient art and industry that is not represented" (*Mus. Ital.*, p. 694). Nearly all of these are at present placed in the Museum at Candia, with the exception of a part of those found before the beginning of the Syllagos excavations, which belong to the Russian vice-consul, G. Mitzotaki.

The following enumeration of the classes of objects found is taken from Dr. Halbherr. 1. *Plate bronzes*: (a) votive shields, of which there

are ten large ones in various states of preservation and of artistic workmanship, and eleven of smaller size and no artistic merit; (b) dishes or *φιάλαι* = paterae, eight of which are covered with ornamentation in relief, while a large number are plain; (c) wine-jars or *oinochoai*, none of which have any decoration; (d) kettles or *lebetes*, seven of which are entire, some of them with ornamental handles. II. *Cast bronzes*: (a) groups of very archaic decorative figures, *e. g.*, chariots, vessels, animals, *etc.*; (b) archaic statuettes of nude male and female figures; (c) votive animals; (d) handles of vases, tripods, *etc.*; (e) feet of tripods, and bases and feet of other objects; (f) ornamental figures, *e. g.*, a sphinx, a lion, a horse, birds and serpents. III. *Various votive offerings*: (a) jewelry; (b) objects in ivory, amber, rock-crystal, cut stones, *etc.*; (c) pseudo-Egyptian majolicas; (d) common terracottas.

These objects belong to very different periods and styles, for they extend through a space of over a thousand years, and include prehistoric, Oriental, and Hellenic works. Far transcending all others in importance is the class of bronzes, not cast but hammered, including the shields and paterae. These are all reproduced in the album of plates accompanying the memoirs of Halbherr and Orsi.

Leaving untouched, at present, the many interesting questions connected with these discoveries—the Kretan legends, early cave-worship, the practice of votive offerings, the objects of prehistoric workmanship or of late Hellenic times—I will follow Signor Orsi's example, and confine my examination to the shields and paterae, which a mere glance suffices to place in that class of early Kretan antiquities which we have seen Milchhöfer define as the supple, fantastic, Asiatic, metal style.

SHIELDS.

All the shields are circular, with a diameter varying from 0.55 to 0.68 met. and so thin that they have a thickness of only 1 mm. on the edge, and $\frac{1}{2}$ mm. in the central portions. They are without handles, but have holes either for suspension or for attachment to a background. This proves that they were not made for use but for votive offerings. Apparently, they were placed on wooden stands around the interior of the cave, and near them were stuck the numerous arrowheads found in their vicinity. The shields are hammered from a single metal plate, and the surface, with one exception, is not flat but convex at various points, especially in the centre, which usually projects several inches beyond any other part of the surface, forming an elaborate boss or

omphalos, generally in the shape of a magnificent lion-head. The ornamentation consists, for the greater part, of human or animal figures in relief, generally divided into concentric zones by a *torsade* or by a ball-decoration. Two shields, which we will term the *Shield of Merodach* = *Melkart* and the *Shield of Horus*, are totally different from the rest, and first claim our attention: in them a single scene occupies the entire surface, which is not, as in the others, divided into zones encircling the central boss. The plates illustrating these and two other shields and two of the *φιάλαι* are reduced from plates I, II, IV, VI, VII, IX in the album accompanying the *Museo Italiano*.

Shield of Merodach = *Melkart* (PLATE XVI = *Mus. Ital.*, pl. I.).—This shield occupies a unique position in the series, on account of its style, workmanship, and arrangement. It is evident that there is a mythologic and not a merely decorative significance in the group of figures that fill the perfectly flat surface of the shield. In the centre stands the heroic figure of a god, represented as triumphing over his enemies. His attitude is one of violent motion: he stands on a bull with left leg well advanced and resting on the bull's head, while his right foot is placed on the animal's tail, and over his head he swings a lion which he holds by a fore and a hind paw: he is clad in tight-fitting garments which leave the lower part of his limbs uncovered. The heavy square beard, long plaited hair, and exaggerated muscular development, are entirely Assyrian, and this indication of style is supported by every detail of the subject. One familiar with Assyrian art is reminded of two myths, that of the hero Izdubar and that of the god Merodach, which have some points in common. Izdubar¹⁰ is the hero-prince who fought and conquered the lion and the bull of Anu, as related in the earliest legends of Babylonia. He is often represented on the seal-cylinders¹¹ in the act of struggling with the

¹⁰ The myth of Izdubar, the Babylonian Herakles, identified by some Assyriologists with the Biblical Nimrod, is of solar origin, and his twelve labors are typical of the 12 months of the year and the 12 signs of the Zodiac.

¹¹ The Izdubar legend is the favorite subject on the very earliest cylinders, and examples are found in London, Paris, the De Clercq Collection, and New York (Metrop. Mus.). An examination of the *Catalogue of the De Clercq Collection* gives the following result. (1) Izdubar fights the lion standing, Nos. 47, 79; (2) Izdubar holds lion by the hind-leg, Nos. 48, 135 bis; (3) Izdubar holds up lion by tail, No. 41; (4) Izdubar gives drink to bull, No. 46; (5) Izdubar fights both lion and bull, Nos. 43, 80; (6) Izdubar fights lion, also bull, No. 55; (7) Izdubar fights two bulls, No. 71; (8) Izdubar fights two lions and two bulls, Nos. 69, 150; (9) Izdubar and Hea-bani struggling, No. 181 bis; (10) Izdubar and Hea-bani with lion and bull, Nos.

lion, and sometimes he even holds the animal above his head in exactly the same position as on the shield (*e.g.*, in the British Museum, *Fig. 13*). In the earlier cylinders, the lion is large, and an equal struggle is represented; later, he is a mere plaything. This latter idea is exaggerated in Assyrian art, where Izdubar quietly carries a miniature lion under his arm. In the Babylonian seals, Izdubar is always nude, and the scanty costume of our shield may be a reminiscence of this. But, beside these analogies with the myth of Izdubar, there are others with that of Merodach, the son of Anu, the god who protects mankind, the slayer of the dragon Tiamat. As Izdubar is the prototype of Herakles, so Merodach is that of the Phœnician Melkart. On Assyrian cylinders,¹² Merodach is represented in exactly the position of the figure on the shield, with left foot resting on the head and right foot on the tail of a fierce galloping lion or dragon, as he rushes against the retreating



FIG. 13.—Figure from
hematite Seal-cylinder;
Brit. Museum.

Tiamat. I am not acquainted with any monuments in which Merodach is standing on or accompanied by a bull, and it is possible that the Phœnician artist combined elements from the two legends.

A third element, from the Assyrian scene of the "Adoration of Aššur and the Sacred Tree," seems even more prominent in the artist's mind. The accompanying scene (*Fig. 14*), from a cylinder of the middle-Assyrian period in the British Museum, bears the closest analogy to that on the shield. It represents a crowned divinity standing on a bull, with two hawk-headed ministering genii, holding fruit plucked from the Sacred Tree, which either has disappeared or is placed, in miniature, on the left. That this divinity is Aššur himself is made probable not only by the above connection with the sacred tree, but by another cylinder, also in the British Museum,¹³ in which a figure armed with the usual attributes of the god is standing on a reclining bull within a tabernacle, outside of which stand two man-bird genii, while

42, 43, 44, 45; (11) Izdubar with bull, and Hea-bani with lion, Nos. 49, 50, 51, 52, 53, 53bis; (12) Izdubar with Hea-bani, and Hea-bani with lion, Nos. 58, 59, 60 (+ Izd. w. lion); (13) Izdubar and Hea-bani, each fights a lion, No. 81; (14) Izdubar against Hea-bani and lion, Hea-bani and bull, Izdubar and bull, Nos. 62, 65. A number of cylinders where the subject was in doubt have been omitted. For further elucidation and examples from other collections, see MÉNANT, *Cylindres de la Chaldée*.

¹² MÉNANT, *Oriental Cylinders of the Williams Collection*; JOURNAL, vol. II, pl. v. Cf. MÉNANT, *Cylindres de l'Assyrie*, figs. 23, 26, etc.

¹³ MÉNANT, *Cylindres de la Chaldée*, fig. 50.

above is the winged globe, the symbol of Aššur. In scenes like the above, the Sacred Tree usually occupies the principal position, and the winged globe and half-figure of Aššur are placed above. In *Fig. 14*, on the contrary, the god occupies the place of honor, and his emblem is displaced. On either side of the central group stands the figure of a winged male genius, in position, robes, and style, similar to the genii adoring the Sacred Tree on Assyrian basreliefs, especially those of Aššur-nazir-pal. The objects in the hands of the genius on the right do not correspond to the fruit which is usually being plucked by the Assyrian genii, but they may be a reminiscence of this act, and the obvious conjecture is that they are adoring the Sacred Tree and the god Aššur, like their prototypes.¹⁴ In support of this conjecture, we find the sacred tree, ousted, as in the cylinder, from its place of honor, projecting, in the form of the



FIG. 14.—*Lapis-lazuli Seal-cylinder; British Museum.*

anthemion-palmette, over the head of the central figure, from the string of lotus-buds which forms the border.¹⁵

In the three human figures the type is not Assyrian: the features are irregular and puffy; the nose fat and retroussé; the mouth sensual; the cheeks fleshy; and the total effect one of coarseness and vulgarity. Orsi attributes this shield to the workshops of Tyre, mainly on account of its worship of Melkart. Granting it to be of Phoenician workmanship, it seems far more probable that it came from some centre where the Phoenician artists were under direct Assyrian influence. We know that, after the Hittite power had been broken up in the ninth century, under Aššur-nazir-pal, Salmanasar III, and their successors, and Nineveh had become, especially under the Sargonids, the centre of Asiatic

¹⁴ The fringe of the robes is evidently made of feathers: it is noticeable that the figures do not carry, in one hand, baskets for receiving the fruit of the Sacred Tree.

¹⁵ It may be noted that the border, contrary to Signor Orsi's opinion that it is of pomegranates, appears to be of lotus-buds, a form slightly different from the more customary border in which the bud alternates with the full-blown flower.

commerce¹⁶ and the capital of a great empire, she grew to be the Paris of the ancient East and to include within her walls a motley population drawn from all neighboring countries—Syrians, Babylonians, Jews, Hittites, Phoenicians, and others. These foreigners settled, many for purposes of trade on their own account, many as agents for foreign houses; and we may well imagine that important workshops for the production of the objects in metal so loved by the Assyrians were established by the Phoenicians in a city where they could best work to suit the taste of their patrons.¹⁷ This shield is unique in the strong Assyrian character of its style, and yet, though at first tempted to call it an Assyrian work, the physiognomy of the figures, the confusion of two unrelated subjects, and many points of detail, show it to be not an Assyrian original. However, the great difference between it and the other shields found with it, proves it to have been made at a different artistic centre, under different influences, and perhaps at a different time. On account of its apparent derivation from the Assyrian large-figured sculptures of Assur-nazir-pal (882–857), before the introduction of a multiplicity of small figures, as in later Assyrian art, it may be allowable to suggest, as an approximate date for this shield, the period between 850 and 725 B. C.

Shield of Horus (PLATE XVII = *Mus. Ital.*, pl. IV).—This magnificent shield is the largest of the series, having a diameter of 0.68 met. Though of such size, it is formed of the thinnest piece of metal (1 mm.), which is hammered into an extremely convex form with a very high centre, the top of which has been destroyed, thus rendering problematic the kind of bird whose head was torn from its body in this destruction.¹⁸ Many other fragments are wanting, as shown by the plate. This shield is the most beautiful of the series for artistic conception and workmanship and for its high finish, and is certainly the most wonderful piece of early hammered metal-work on a large scale that has come down to us from pre-classic antiquity. Almost one-half of the entire surface is occupied by the immense bird already mentioned, whose widespread wings extend from edge to edge. Its feet rest upon a sphinx rampant

¹⁶ LENORMANT, *Histoire ancienne de l'Orient*; TIELE, *Assyrisch-babylonische Geschichte*; SAYCE, *Introduction to Ancient History*.

¹⁷ This conjecture is supported by the numerous bronze dishes, etc., found by Layard in the palaces of Nineveh, especially in the Northwestern palace at Nimrūd, from which Perrot even conjectures that the Mesopotamian artists may have taught this industry to the Phoenicians.

¹⁸ It has not been thought necessary to speak of every detail of these shields, as this has been so carefully done by MM. Halbherr and Orsi.

which occupies the entire lower surface, and from beneath which rise two large serpents whose heads with crescent-shaped horns almost meet at the top of the shield, being separated by the bird's tail. Under the head of each serpent stands a small lion, and, to complete the enumeration of figures, a he-goat is placed below, on the left, over the tail of the sphinx. The most elaborate workmanship is lavished on the details of the central bird; and to it we must look for the key to the interpretation of the scene. Though we have here no human figures, as in the previous shield, it is none the less significant, and is not a heterogeneous juxtaposition of animals for a merely decorative purpose. According to Orsi, this is a cosmic scene, which he interprets as follows: the eagle or hawk (as he terms the bird), a divine or *celestial* symbol, holds the sphinx which is the emblem of *eternity*; the lions and he-goat are *sidereal* in character; and the two serpents are symbols of the *lower world*. In the place of this interpretation, another, perhaps slightly more probable, may be suggested. The scene might symbolize the triumph of Egypt over Assyria:¹⁹ the Egyptian Horus-hawk tramples on the Assyrian winged creature, the emblem of her strength so often represented at the entrances to her royal palaces, and in this case turned into a sphinx;²⁰ the great Egyptian serpent²¹ subdues the Assyrian lion. Some support for this suggestion may be found in quite a series of works of art by Phœnician artists, to which attention has been called especially during the last two years, which seem to represent the ups and downs of the long contest between the two great Oriental empires,²² and to show how strongly the Phœnicians, standing in close relations with both empires and on the very battle-field between them, were impressed by the great struggle. It is certain that this shield is almost as distinctively Egyptian in character as the previous shield was Assyrian.

Dr. Halbherr considers the body of the central figure to be half bird half fish, and the missing head to be that of a woman—a queer combination that seems hardly justified by the fragment of what appears to him to be a curl. Sig. Orsi's conjecture of an eagle or hawk seems

¹⁹ Only after 714 was the supremacy of Assyria over the western coast established beyond dispute; and at various periods (which may be found in the histories of Lenormant, Tiele, and others) Egypt had the advantage.

²⁰ Sphinxes were represented in Assyrian art as supporting the columns of temples and palaces, as guarding their portals, and as supporting figures of genii or divinities.

²¹ See the *Book of the Dead* for many references to the great infernal serpents.

²² *Gazette Archéologique*, 1888, No. 1; *Amer. Journal of Archaeology*, vol. iv, p. 169 sqq.

far more probable. The Horus-hawk was one of the most popular emblems in Egyptian art: its position on the shield, not resting on the back of the sphinx, but clutching its side, is rather singular. The sphinx itself is not Egyptian. The Egyptian sphinx was always (except in cases like those of the sphinxes of San) crouching and without wings, while the Assyrian sphinx was standing and winged, as on the shield. Only in the high tiara is any Egyptian influence visible. According to Orsi, all the sphinxes on these shields are male. In the case of the present sphinx, the question is not easy to settle, but from the evidence of the others, especially of those in plates II and III of the album, where the dugs are quite evident, one is led to lay down the general rule, that all the sphinxes are female. Most Egyptian in style of all the figures is the charming he-goat in low-relief, whose delicately-moulded limbs and slender and accurate forms seem transferred from some Egyptian bas-relief of the New Empire. Not so the lions: their heavy and muscular forms are more reminiscent of Asia Minor and Assyria.

Shield of Ashtaroth = Astarte (PLATE XVIII = *Mus. Ital.*, pl. II). This shield occupies an intermediate position between the class that has no central omphalos (Shield of Melkart) and those in which the central lion-head is surrounded by a succession of concentric circles. The centre has been destroyed, as well as a part of the circumference, and the remaining parts are in fragments. Around the centre is a wide space occupied, above, by the figure of a nude female whose arms are outstretched toward a lion on either side, one of whose ears she has seized. This scene occupies the upper half of the circle; below, are two sphinxes facing each other on either side of a reversed lotus-flower. The sphinxes are almost Egyptian in their forms and attitude; they are unmistakeably female, and are crouching, with elongated body; only the wings do not droop, as in Egypt, but rise up straight. Three times, and in three shapes, is the lotus reproduced, always in its purely Egyptian forms. The figure of Astarte has a peculiar and elaborate head-dress, so rudely expressed that it would be useless to speculate upon it. In all the figures, we see an art so barbarous and ignorant as to make impossible a community of origin between this and similar shields and the two precedingly described: there is no modelling in the forms, no accuracy in the drawing. Signor Orsi makes an elaborate statement of the varieties of female Oriental deities—Astarte, Anāitis, Belit, Ishtar, Anat, *etc.*: I will not undertake to follow him,

but will only remark that the nude goddess with hands pressed on her breasts, such as we find in Babylonian, Syrian, and Phoenician monuments, is certainly not Ishtar.²³ That the figure on the shield is Ishtar and that her presence is explained by the fact that Ishtar was goddess of war is highly improbable, because, when in that character, Ishtar is always draped and armed.²⁴ Neither can this figure have any relation with the draped and winged Oriental Artemis, who is represented as holding an animal in each hand. In this connection, I will draw attention to a seal in the British Museum, probably Persian, in which the hero-god is represented seizing two winged bulls by the horns (*Fig. 15*), each of which rests its hind-legs upon a crouching winged sphinx: to make the parallel exact, it is necessary only to change the central figure from male to female and to compress it within the limits of the border.



FIG. 15.—Carnelian Seal-cylinder; British Museum.

The lions remind us of those on Corinthian vases and on Phoenician bronzes found in Central Italy. Orsi attributes this shield to Sidon.

There are some fragments of another shield published on pl. x of the *Museo Italiano* and on p. 706 of the text, which, also, we may term a *Shield of Ashtaroth* = *Astarte*, superior in art and in technique to the better-preserved shield just described, and interesting, too, as presenting an arrangement, unique in the series, of two small outer zones—one of palmettes, the other of deer—encircling the main subject which surrounds the central boss. It would appear that, in the upper half, the nude figure of *Astarte* (far more shapely than the figure on the other shield), holding a long staff in each hand, stands between two

²³ Orsi says: *Istar è la sola divinità che dai tempi più antichi offre un vero carattere sideriale e planetario*. On the contrary, it is a fact, that the entire mythology of the early Babylonians was cosmic and especially astronomical, and that Sin (Moon), Šamaš (Sun), Ninip (Saturn), Nergal (Mars), Nebo (Mercury) and Marduk (Jupiter) are nearly all primary planetary deities.

²⁴ Ishtar had a triple aspect: Ishtar of Erech was the universal Mother; Ishtar of Nineveh, the national Assyrian goddess; and Ishtar of Arbela, the goddess of war.

upright sphinxes. Below are two sphinxes face to face, as in pl. II: lotus-flowers filled the space between the upper and lower groups. The central boss has entirely disappeared, but the presence of a large leg over one of the lower sphinxes, and signs of a corresponding one on the other side, would indicate that the boss did not consist of a lion-head, as Halbherr thinks (p. 705), but of a creature similar to that on the Horus-shield.

The Lion-shield.—The shield on pl. III of the *Museo Italiano* is similar to the preceding in arrangement, and has a variation of the same subject. The lion-head in the centre is preserved: the lions at the top have between them, not an Astarte, but a sacred tree which they seem to be adoring, while, below, two crouching sphinxes have laid hold of lotus-stalks forming part of a sacred lotus-tree, whose flowers they are smelling: the style of this shield is also exceedingly rude and imitative.

The Warrior-shield.—The fragments of a shield given on pl. V of the *Museo Italiano* belong to the same category as the preceding two. Here, the single concentric ring that contains figures is very much narrower; above, are two warriors in full armor—with helmets, corslets, and round shields—striving for a prize; below, two lions are doing obeisance to a divine symbol, similar to that of the god Aššur, formed of a winged circle from which project two hands holding thunderbolts.

Shield of the Goats.—Plate IX-1 of the *Museo Ital.*, though rude, is of especial interest (PLATE XIX-1): the reversing of the animals in both zones, thus separating them into two equal divisions, shows that the shield ought to be held so that the animals should always be seen in the correct position. The outer zone is of bulls, the inner, of a goat-like animal identified as the *Capra Sinaitica*. The violent action and elongated bodies of the latter remind one of the style of animals on the poniard-blades of Mykenai.²⁵ The lion-head of the centre is the best-preserved and the largest in proportion of any on the Kretan shields, and is remarkable for artistic conception and execution. What is preserved is simply the central part of the original shield, and may be either a fragment or a central *umbo* or disk. The details are far more carefully elaborated than usual, both in the torsade-decoration and in the animals.

Shield with Hunting-scenes.—More than a hundred minute fragments remain of this shield, which originally may have surpassed in interest all the better-preserved specimens, as it contained a great variety of

²⁵ *Bulletin de Correspondance Hellénique*, 1884; MILCHHÖFER, *op. cit.*; VON SYBEL, *Weltgeschichte der Kunst*, p. 57.

scenes treated with an artistic freedom and felicity, a technical correctness, and a knowledge of animal forms that transcend all but the Horus-shield. From the minute fragments reproduced on pp. 834-38 of Orsi's monograph, we can put together lions, a bear, a hippopotamus and a vulture, together with several human figures. In the perfection of the torsade-moulding, in the elaboration of the detail in the vulture, and in the superb action of the leaping lions, there is a near approach to the Assyrian art of the Sargonid period. At the same time, a glance at *Figure 16*, which reproduces one of the lions, will show a very interesting fact: it is almost the exact counterpart, in proportions and attitude, of one of the lions in the lion-hunt scene on the best-known

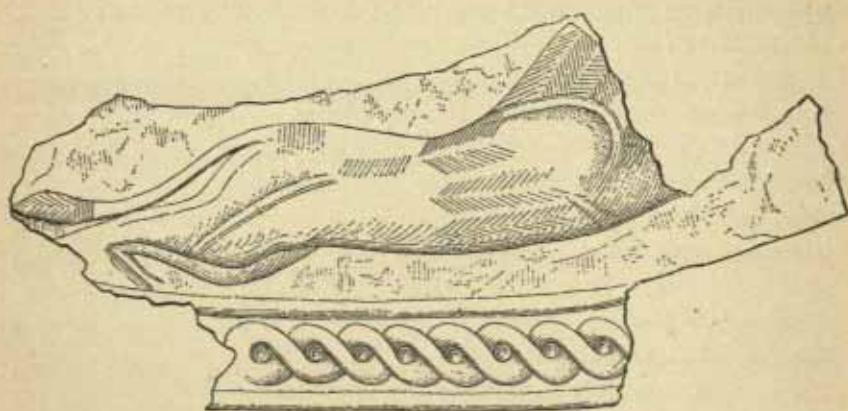


FIG. 16.—Fragment of bronze shield with hunting-scenes.

of the poniards from Mykenai, alluded to in Note 25: Which is the artistic prototype? The comparison is interesting, not only as it offers one more indication of the possible Kretan origin of the art of Mykenai, according to Milchhöfer's suggestion, but also as it assists in arriving at an approximate date for the whole series of Mykenaiian objects, placing them not far from the VIII century B. C., if the analogy with these Kretan bronzes, shown also in the shield of the goats, be correct.

The four fragmentary shields found, in 1880, at Van in Armenia, and now in the British Museum, serve to date some of the Kretan bronzes, for the inscription on one of them contains the name of Rushas, a king of Armenia contemporary of Aššur-bani-pal; and they also illustrate the custom of offering votive shields, as, like the Kretan shields, they

consist of a very thin sheet of bronze, about $1\frac{1}{2}$ millimeter in thickness. The shields of Van are decorated with concentric circles between which walk rows of animals. The three shields from Caere published in the *Musei Etruschi* (cf. DUMONT, *op. cit.*, p. 126) also have zones of animals, but of more minute proportions. These are the only known monuments analogous to the Kretan shields.

PATERAE OR PHIALAI.

Hardly less interesting than the shields, though less novel, are the low, flat dishes, called paterae or phialai, already well known as a class by a considerable number found, especially at Nineveh, in Kypros, and in Italy. The Kretan phialai are illustrated in plates VI to IX of the *Museo Italiano*: three are entire, one much ruined, and four mere fragments. Three styles are represented. One, known already by two Kypriote paterae, which had been considered until now to belong to a purely indigenous Kypriote art (pl. IX). To the second style belong the two best-preserved paterae, Egyptian in type (pl. VI). The third includes a number of pieces whose decoration consists of concentric zones of animals in a style which will be noticed later, and which has much in common with the early-Greek type, especially Corinthian. According to Orsi, the paterae belong to the same period as the shields, that is, the VIII century B. C.

The Banquet-paterae.—Among the fragments are some belonging to three paterae—one being of larger size than any yet known—which are of particular interest for the rarity of the subject. Though so little remains, the scenes can be explained from other paterae which are completely preserved, or nearly so. Two of these were found in Kypros by General di Cesnola—one at Idalion,²⁶ the other at Kourion;²⁷ the third is in the Varvakeion Museum at Athens.²⁸ In the larger Kretan fragment, we see portions of three female figures advancing hand in hand as if in rythmic dance, preceded by two female figures bearing birds and fishes, who form part of a procession of persons bearing offerings. This portion of the composition is seen on the Idalion patera, but has been destroyed in that from Kourion. In the second fragment, much injured and small, we see, in the centre, a table covered

²⁶ CESNOLA, *Cyprus*, pp. 77, 326, etc.

²⁷ A. MARQUAND, *An archaic patera from Kourion*: *Am. Journal of Archaeology*, vol. IV, pp. 169-71.

²⁸ PERROT and CHIPÉZ, vol. III, p. 673.

with burnt offerings, on one side of which stands a priestess with the lituus(?) or flabellum(?), while on the other side is another woman with cymbals standing next to a table with drink-offerings(?): probably the other two women next to her should be completed, one with the double pipe the other with the lyre. The scenes on these two fragments are different parts of one whole, *i. e.*, of a sacrificial or banquet scene to Aphrodite, in which figure the goddess and a procession of female worshippers, dancers, musicians, and bearers of offerings. The style is slightly different in the two fragments, the second being decidedly Egyptian in the sharp profiles and the slenderness of the figures.

Egypto-Phoenician paterae.—Two dishes are executed in that style practised by some Phoenician artists which is so Egyptian in character as to produce a momentary delusion, dispelled by a closer examination. The one selected for reproduction on PLATE XIX-2 is taken from pl. VI of the *Museo Italiano*, and is of the greater interest that it comes apparently from the hand of the very artist to whom we owe an identical dish found at Nimrūd by Mr. Layard and published in pl. 68, pt. II, of his *Monuments of Nineveh*. Every detail in these is so alike that they seem cast in the same mould. The Ninevite dish cannot be accurately dated: it can only be said that, like all the rest of the objects found with it, it must have been made between the reigns of Aššurnazir-pal (882-857), the builder, and Sargon II (721-704), the restorer, of the palace, with a balance of probability in favor of the former, as Sargon occupied it only until he built his own palace at Khorsabad. This would add to the indications already given that some of the bronzes of the Cave of Zeus may be assigned to the latter half of the ninth century. In both paterae, the encircling lines of ornaments are scratched, while the figures in the outer circle are raised. These figures in relief show a winged sphinx, crowned with the crowns of Upper and Lower Egypt, walking toward a group of three columns with campaniform capitals, two of which support uraeus-serpents with solar disk, and the third, a scarabaeus: these columns stand between four lotus(?) buds rising on long stalks: this scene is repeated four times. In the second dish, the outer zone contains four sphinxes of similar character alternating with bulls raised on stands.²⁹

²⁹ In the catalogue of paterae given by DUMONT et CHAPLAIN, *op. cit.*, pp. 112-26, twenty-four from Nimrūd are described which were omitted by Layard. Among these are four on which there are winged sphinxes. On p. 126, three bronze shields from Caere are mentioned which are very similar to the Nimrūd paterae with concentric zones of animals and decoration.

Paterae with zones of animals.—This class of dishes (represented, for instance, among the Nimrūd paterae by Layard, *Monuments*, pt. II, pl. 60) is found in two instances among the Kretan bronzes, on pls. VII and VIII of the *Museo Italiano*, the former of which is reproduced on our PLATE XX, as being artistically the most interesting and approaching more closely to the Nimrūd paterae and to the Mesopotamian style: this kind of decoration is that made familiar to us by Phœnician, early-Greek, and Etruscan imitations, and need not be dwelt upon.

MM. Dumont and Chaplain devote chapter X of their large work *Les Céramiques de la Grèce propre* (pp. 105–60) to a study of “Oriental influence,” in which is given a catalogue of the different works found in Mesopotamia, Assyria, Phœnicia, Asia Minor, Kypros, Rhodos, the Archipelago, Greece, and Italy, which have so strong a resemblance in style and decoration as to presuppose a common origin. These works are almost entirely of metal, and comprise the paterae and shields: all that had been discovered previous to 1883 are here catalogued and carefully described. We refer to this chapter for analogies to the band-like or torsade decoration of the Kretan bronzes (pp. 105–6), for the zones of animals (pp. 108–9), for the lotus and palmette decoration, and for a general appreciation of the monuments, their style, date, and authorship. M. Perrot, in volumes II and III of his *Histoire de l’Art*, devotes especial attention to this class of bronzes. After a careful examination of the bronzes known to him, M. Dumont (*op. cit.*) decided to recognize in them three styles: the first and earliest, an Egyptian style; a second, one which combined Egyptian and Assyrian influences; a third, whose best expression is found in the monuments of Persepolis. According to him, the earliest works show as much inability in the treatment of the human figure as ability in the merely decorative work. In the opinion of M. Dumont and other authorities, the paterae cannot be earlier than the seventh or eighth centuries, and may in some cases be as late as the beginning of the fifth. Signor Orsi does not admit the latter date, and is in favor of the eighth century for both shields and paterae. In my opinion, he is too easily satisfied. The objects found in the Cave on Mount Ida belong to such a variety of periods that it would be quite reasonable to suppose that in the case of the shields and paterae the differences in style indicate considerable differences in date. The shield of Melkart may belong to the end of the IX century or the beginning of the VIII; those of Horus and Ashtaroth to a slightly later date; the

shields and paterae of the geometric style, with concentric circles, to the VII; and the barbarous paterae, to the VI century, though the evidence is not such as to make any of these attributions certain.

A Phoenician origin is attributed to all these bronzes: this may be correct. It might not, however, be an error to recognize, in a certain group, the work of Kretan artists. The artistic traditions of metalotechnics in Krete go back to pre-Homeric times, and, if any reliance is to be placed on them, we must acknowledge that, of all the industrial arts, working in bronze probably reached the highest degree of perfection. Why, then, should we not expect to see, among the votive objects found in the Cave of Zeus, works by native artists? If we eliminate the works showing direct Egyptian and Assyrian influence, and those which are avowedly Phoenician, there remain several pieces unaccounted for. Foremost among these is the *Warrior-shield*, whose men in full panoply of war are equally distinct from any known Phoenician, Assyrian, or Egyptian works. M. Perrot is inclined to believe that the manufacture of paterae decorated with figures began in Mesopotamia before being adopted by the Phoenicians: this would also apply to the shields. Whether the metal-industries of Krete were derived from the Phoenicians or were self-developed cannot be decided, and it may be that, in Kretan works, we might expect to find traces of the Phoenician style. There is a primitive rudeness about some of these shields that seems referable to early Greek workmanship. In describing the first class of paterae, it was noted that they were almost identical in style and subject with two found in Kypros, and this reminds us of the fact, that, according to early tradition, Kretan metalworkers established themselves in Kypros. Perhaps this class of dishes, then, represent the native Kretan style. A future and careful study of these bronzes, aided by new discoveries, may give the long-sought solution of the nexus between Oriental and Greek art.

A. L. FROTHINGHAM, Jr.

REMAINS OF AN ANCIENT GREEK BUILDING DISCOVERED IN MALTA.

The remains of the basement-floor of the building, a ground-plan of which is given in *Figure 17*, was discovered in February, 1888, in a field (archiepiscopal property) called *Nadur*, and formerly bearing also the name of *Teides-Iz-zghir*. They lie at a distance of about 5 miles to the south of Valletta, and midway between the villages of Luca and Mkabba, in a lonely but well-cultivated district of the island. Though constructed of large blocks of stone, these remains cannot, in any way, be considered as belonging to the megalithic class of structures of which there are so many in these islands: they differ from the megalithic class both in type and in mode of construction.

The very few fragments of cornices found amongst the *débris*, and the large blocks carefully cut, neatly dressed, and laid with mortar in regular courses, 1 ft. 10 ins. high, testify to the Greek origin of the building. It probably belongs to the same epoch as (1) the portion of a Greek house still existing in the village of Turriek, (2) the wall bordering on the road leading from that village to Casal Safi, (3) the remains existing on the road to Sta. Maria Tas-Silc on the promontory of Delimara, (4) several others which are seen elsewhere in the Maltese Islands.¹

The two tanks, marked *A, A*, on the ground-plan (*Figure 17*), bear a great resemblance to the tank in the lands Ta Medeniet, near the Phœnician temple of Melkart.² These tanks, like that, are of a primitive construction, having a flat roof of roofing-stones (say 1 ft. thick, 3 ft. broad, 8 ft. long) resting on architraves or lintels (measuring, on an average, 8 ft. \times 1 ft. 10 ins. \times 1 ft. 10 ins.) supported by rows of monolith pillars (the greater part of which are about 9 ft. high and 1 ft. 10 ins. square). This primitive mode of constructing reservoirs for water leads me to believe that the building in question belongs to the early Greek epoch.

It is beyond doubt, that Greek colonies had settled in these islands about 700 B. C., which is very nearly the epoch of most Greek settle-

¹ Illustrated in my *Report on the Antiquities existing in the Islands of Malta*, 1882.

² See illustration on page 22 of said *Report*.

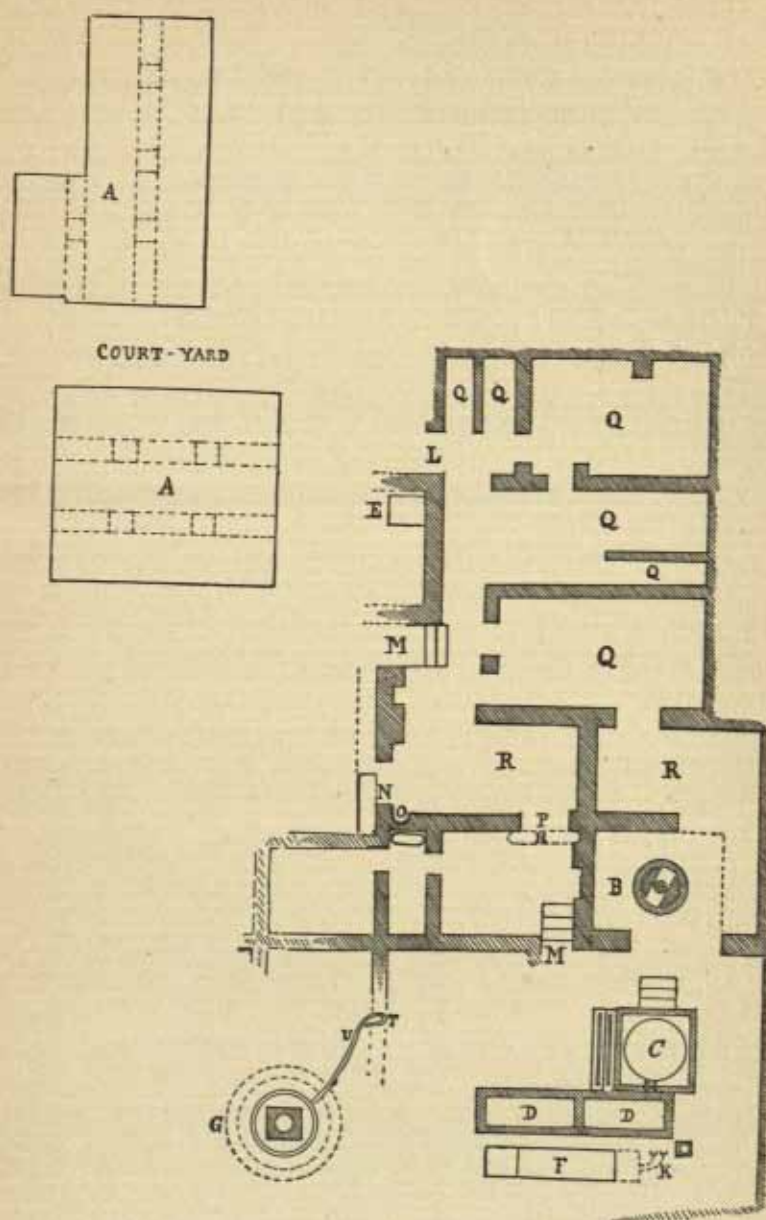


FIG. 17.—Ground-plan of the portion excavated of Greek Farm-house discovered in Malta.

ments in Sicily.³ It is also certain that they remained in the islands throughout the period of the Roman dominion. A comparison of the plan of this building with that of any of the Maltese megalithic monuments, such, for instance, as that of *Hagiar Kim*, in Malta, or *Gigantia*, in Gozo, shows, at a glance, the difference in their type. The plotting of the plan of our building shows nothing of the apsidal form that predominates throughout the Maltese megalithic monuments and constitutes their characteristic feature; in which the attempt at decoration by symbolic ornaments, and the internal arrangement, consisting of numerous hidden recesses and niches (proving their destination as places of worship) offer a great contrast to the remains now unearthed, which present in the doorways, steps, grinding-mills, troughs, sinks, *etc.*, the characteristics of a private building. It is, in fact, nothing more than a large farm-house or country-residence, containing in the basement-floor what is necessary for carrying on agricultural operations on a comparatively large scale.

It is, as yet, difficult to make out with certainty what portion of the original building has been discovered; the more so, that many of the remains of the walls have been demolished or otherwise disturbed, owing to the excavations having been carried on without proper supervision or direction. It is, however, most probable that the portion now seen is an angle of the sides or wings which might have surrounded a courtyard overlying the two tanks mentioned above, and affording an easy means of communication, on the inside of the building, between the several parts of the premises at the basement-floor. In this case, *L* would be the entrance from the courtyard into the premises, as shown by the presence of the jambs; *M, M*, two doorways leading to parts of the premises situate at a higher level, as it is to be inferred from the steps still existing; whilst a door (*N*) afforded access to other rooms in the basement-floor. This door has, near its jamb, a groove (*O*) intended, no doubt, to receive the edge of a round stone-slab like the one seen at *H*, sealing up doorway *P*. Although it is rather difficult to surmise the destination of each of the rooms and recesses shown in the drawing, still I would say that the areas *Q, Q, Q* appear to have been used as stables or sheep-pens; and *R, R* may have been used as places where the olives were stored to ferment before being crushed and pressed.

The actual position of the grinding-mills, troughs, *etc.*, which are still *in situ*, clearly explains, in my opinion, the several stages of the

³ Report aforesaid, § 32.

process of expressing oil, for which these mills, *etc.*, were intended. I consider it, in fact, most probable that the fruit, after having been split and crushed in the hard-stone mill (*B*), was removed to the other mill (*C*), whence the oil was made to percolate through the cutting (*S*), still existing in the floor of the mill (*C*), into the troughs (*D, D*), partly filled with water for the purpose of purifying the oil. The oil so expressed was finally carried and poured into a sort of receptacle (*T*), whence it was made to run through a channel (*U, U*) into a vat (*G*) purposely made with a compost of lime and *diffun*, that is to say, ground pottery, and there stored. That water was used for the purpose here mentioned is clearly evinced from the presence, in close proximity to the troughs (*D, D*), of a sink (*F*) into which all polluted water from the troughs could be easily drained off. This primitive process would bear a great resemblance to that still followed in many parts of Barbary.

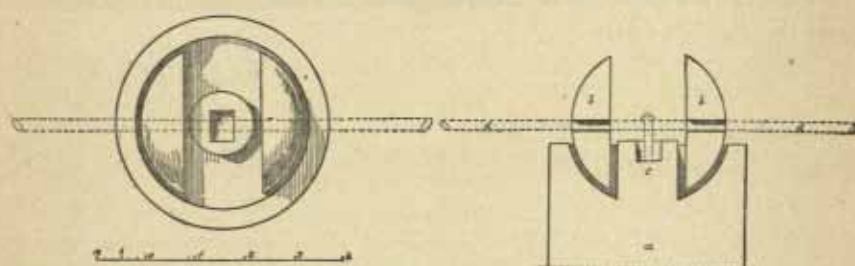


FIG. 18.—Plan and Section of Crushing-Mill in Greek farm-house: marked *B* on ground-plan.

The process of expressing oil just described is further illustrated by *Figure 18*, which shows the plan and section of the hard-stone crushing mill, *B*. It is made of a basin (*a*) (4 ft. 2 ins. in diameter, and 2 ft. 8 ins. high) in the form of a segment of a sphere. It is provided with two edge-runners (*b, b*) (2 ft. 9 ins. in diameter) which also have the form of a segment of a sphere made to fit into the cavity of the basin: each of the two edge-runners has a hole in the centre, apparently for the insertion of a horizontal axle (*d, d*). From the centre of the basin rises a cylindrical pillar (*c*) supporting a pivot on which revolved the horizontal axle now mentioned, let through the edge-runners and working like a capstan-bar, thereby setting in a rotatory motion the two edge-runners (*b, b*).⁴

⁴ This mill is entirely similar to the two discovered in 1879 among the remains of the Roman Villa at *San Paul Milkghi* at *Ben-Uarraf*, mentioned in § 95 of the *afore-said Report*.

The storing capacity, say 6200 gls., of the oil-vat (G) being too large for the quantity of oil which could possibly be obtained from a single mill, I am inclined to believe that other mills, which have been either destroyed or removed, existed in proximity to this vat.

Further excavations would, I think, lead to the discovery of the remaining vestiges of the building; and this opinion is confirmed by the farmers of that locality, who speak of stone pavements and other works in masonry as still lying buried in the adjoining lands.

Though nothing remarkable in the way of art has been recovered from these excavations, the remains themselves are of interest as affording additional evidence of the flourishing state of agriculture in these islands at remote epochs, of the existence of large plantations of olive-trees at the time, and that the eastern part of the island was, at a remote period, the most thickly settled, and was studded with large centres of habitation of which nothing now remains but such relics as the above, and their ancient nomenclature.

A. A. CARUANA,
Director of Education.

Public Library, Valletta, Malta,
April 16, 1888.

NOTES.

EXCAVATION OF A CHRISTIAN PALACE IN ROME.

We have received from the well-known leaders in Christian archaeology, Comm. J. B. de Rossi and Enrico Stevenson, an appeal for help to carry on a most important excavation in Rome, unique in its interest, which has come to a stand-still from lack of funds. It is the first time that paintings of a specifically Christian character have been found in a private house; they had hitherto been confined to the Catacombs. The historical character and magnificence of the house itself add to the value of the results to be attained by its complete recovery. I will gladly receive and forward any sums addressed to me, and appeal to those interested in the early Christian Church to help make up a purse of \$500. A. L. Frothingham, Jr., Managing Editor, Princeton, N. J.

Sir:—In 1887 and 1888, excavations have been carried on at Rome, on the Coelian hill, under the basilica of SS. Giovanni e Paolo, resulting in one of the most notable discoveries ever made in the field of Christian archaeology. In some respects, it is even more important than the famous discovery of the subterranean Basilica of San Clemente with its numerous frescos, to the recovery of which many foreigners of all nations contributed. The present discovery is that of a house which must have been one of the most magnificent of ancient Rome, in which, instead of the usual decorative frescos well-known from the examples in Pompeii and Rome itself, the walls are covered with cycles of symbolic Christian paintings, no longer hidden in the subterranean cells and passages of the Catacombs, but used for the decoration of the walls and ceilings of the rooms in which lived Saints John and Paul, martyrs under Julian the Apostate. In fact, this is the first known example of a Christian palace in classic Rome. The entire ground-floor, containing more than fifteen rooms, is still in a good state of preservation. Since the twelfth century, the palace has been buried under the remains of the ruined early basilica: the apartment where the two martyrs were put to death, and where, being buried, their tomb was long visited. This place was turned into a *Confessio*; and, shortly after, three other martyrs were put to death there, and their *Confessio* is decorated with contemporary frescos representing the tragedy. Such frescos are unique in early Christian art. The excavations are under the direction of Comm. G. B. de Rossi and Padre Germano, who began them. Here, as at San Clemente, it is necessary to support the church by piers and vaults, before proceeding to excavate, and this expense makes it necessary to appeal for help to all lovers of ancient monuments and Church history.

Dr. A. L. Frothingham, editor of the American Journal of Archæology, is authorized to receive subscriptions and to transmit them direct to Comm. G. B. de Rossi.

Comm. G. B. DE ROSSI;

P. GERMANO, Passionist;

Mons. DE WAAL, President;

Prof. ENRICO STEVENSON, Secretary;

Prof. ORAZIO MARUCCHI;

Prof. MARIANO ARMELLINI;

} *for the
Collegium
Cultorum Martyrum.*

THE EXISTENCE OF AMERICA KNOWN EARLY IN THE CHRISTIAN ERA.

In 708 A. D., Jacob of Edessa, the famous Syrian ecclesiastic, encyclopaedist, and writer, wrote his work entitled *Hexameron*. Attention has been called to its importance by the Abbé Martin in two papers published in the *Journal Asiatique* (1888). One point is of especial interest. He remarks (p. 455): "I have already said that this learned Syrian had some idea of the existence of a vast continent between Spain and Tingitana, on one side, and China. This appears from his remark concerning an *unknown land situated to the East of China*, but he speaks of it still more clearly in treating another subject, that of the dimensions of the earth. Jacob says: *The length (of the earth) is measured beginning at the Western Ocean; at the gulf placed outside Gadir (Gades?), an island placed in the 5th degree of longitude, at the Western extremity of the inhabited earth. It is said (lit. written) that in front of Spain and the columns of Herakles, between them and the country of the Chinese, which is to the East of India, there is an UNKNOWN AND UNINHABITED LAND.*"

It is evident, then, that rumors of the existence of America had reached the Syrians, before the time of Jacob of Edessa. Whence could these rumors have come? Possibly from China. It is well known that the Syrian missionaries, especially those belonging to the Nestorian sect, spread over the Far-East and had numerous settlements in India and in China, along the seacoast. This had been an accomplished fact for over two centuries before Jacob of Edessa; and, even at the present day, memorials of their presence are found in China. Communications between the Far-East and Syria were therefore likely to be not infrequent; and these countries seem to have been better known at that time, than they were later, to Arabian travellers and geographers. These facts suggest the interesting enquiries, whether this rumor of an unknown continent reached Syria from China; whether, at this early time, the Chinese were acquainted with the coast of Alaska; and whether their knowledge of America went any further.

A. L. F., JR.

REVIEWS AND NOTICES OF BOOKS.

WELTGESCHICHTE DER KUNST bis zur Erbauung der Sophienkirche. Grundriss von LUDWIG VON SYBEL. Mit einer Farbtafel und 380 Textbildern. 8vo, pp. xii-479. Marburg, 1888, N. G. Elwert'sche Verlagsbuchhandlung.

The writer says, in the preface, *Die Geschichte der alten Kunst nach ihren Epochen ist noch nicht geschrieben worden. . . Unsere Weltgeschichte der Kunst will neben der üblichen ethnographischen und systematischen Darstellungsweise die echt historische in ihr Recht setzen, welche den Stoff nach den Epochen ordnet, damit die Entwicklung rein vor das Auge trete.* The attempt to give a clear view of all contemporary developments of art in East and West, to show their relationships and distinctions, and to find a general character in each one, has never really been attempted as Von Sybel attempts it in this volume. The usual ethnographic and geographic method is at once the easiest to carry out, and the least questionable in its bearings and results. The universal and comparative history, as we might term Von Sybel's, is one that can be safely attempted only at a very advanced stage in our knowledge of the subject. Perhaps this stage is being reached in ancient art; perhaps such a work as this will hasten its coming. It is certainly an attempt most interesting, and according to a method which should in future find many able representatives, in which far more depends on the talent of the author than in usual histories. But the novelty is not confined to the text. The illustrations, numerous and of good size, are with few exceptions executed according to the latest method of mechanically reproducing photographs, called in America the half-tone process. As Von Sybel remarks, this is the first history of ancient art which makes use to any extent of a photographic process for its illustration. The result is strikingly interesting. A type is here given which it is to be hoped will be quickly followed. The style of the execution of these illustrations is of the highest excellence, and in pleasing contrast to a history of art recently issued by an American house which makes a boast of using the same process throughout, and whose illustrations are of so vile a character as to merit instant destruction.

The author divides his history into three parts: (1) The Oriental period; (2) the Hellenic period; (3) the Roman period.

The Oriental period has three divisions: (a) groundworks; (b) second millennium, of universal commerce and interchange; (c) Assyrian dominion.

The Hellenic period naturally falls into: (1) archaic Greek; (2) the great masters; (3) the post-Alexandrian age. The Roman period comprises: (a) the last century of the Republic; (b) the Empire; (c) art in the service of the Catholic religion.

The style and arrangement are attractive, and the monuments chosen for illustration and description are typical and well selected.

A. L. F., JR.

ORIENTAL ARCHÆOLOGY.

UN PALAIS CHALDÉEN, par M. HEUZEY, de l'Institut. 18mo (Petite Bibliothèque d'art et d'archéologie). Paris, 1888, Ernest Leroux.

This little volume, the publication of a paper read before the French Society of Architects, is all the more welcome that the official report on the excavations at Telloh has never been completely published. The first part of the book describes the royal palace at Telloh as excavated by M. de Sarzec. The ground-plan here given shows that the general arrangement was essentially the same as that followed by the Assyrians, over two thousand years afterwards. The great difference seems to have been in the decoration; for in the Chaldaean palace nothing permanent, corresponding to the sculptures and frescos of the Assyrian palace, appears to have covered the plain brick walls: also, there are no signs of the use of arches and vaults, as in Assyria. The rooms are grouped around three courts belonging respectively to the men's apartments, the Harem, and the dependencies. The oblong shape of the entire building is peculiar, being made slightly in the form of a barrel by the concave outline of the two longer walls.

As to construction, the most interesting fact elicited by these excavations was from another and a neighboring mound, where M. de Sarzec discovered, in position and perfect preservation up to a considerable height, two large brick piers of about the same thickness as those of mediæval cathedrals. Each was formed by the grouping, so that each circle touched but did not interpenetrate, of four columns built up of bricks so variously and carefully moulded that no two joints coincided, showing an ingenuity from which a modern architect might take hints. These are the first free masonry-supports found in any Babylonian or Assyrian building, and the discovery opens a wide field for conjecture, giving us a much higher idea of the possibilities of Mesopotamian architecture.

The second part of the volume is taken up with the discussion of an interesting piece of early Babylonian sculpture found in another mound, to the illustration of which M. Heuzey brings a great wealth of knowledge of Oriental antiquities, especially of the early seal-cylinders.

A. L. F., JR.

CLASSICAL ARCHÆOLOGY.

DENKMÄLER DES KLASSISCHEN ALTERTUMS, von A. BAUMEISTER.
München und Leipzig: 1885-1888. Druck und Verlag von R.
Oldenbourg.

The completion of Baumeister's "Monuments of Classical Antiquity," which has been, for months, a welcome visitor on the study-table of the classical scholar, is an occasion which should not be allowed to pass without a well-deserved compliment to the intelligent enterprise and liberality that led to the inception of this highly practical publication, and to the business honesty that has preserved the full measure of its promised wealth of attractive illustration undiminished to the end. Indeed, this leading feature has been still more accentuated by an increase of the promised number of illustrations from fifteen hundred to over two thousand. Considering their superior character, this leaves all previous collections of this sort far behind. It is simply marvellous that the student and amateur of antiquity can obtain such a gallery, presenting him with the very cream and choice of all the museums of Europe in a style of reproduction the elegance of which is exceeded only by its faithfulness, at the ridiculous charge of one cent per cut, with the binding and two thousand pages of explanatory text by eminent specialists thrown in. The publishers are not under the necessity of apologizing for the introduction of a single ordinary *cliché* trade-cut, although here and there they have opened a wider circulation to valuable plates previously printed elsewhere. Of these, for example, is Pl. xxii, a facsimile of a Pompeian fresco representing the fall of Ikaros, which we remember to have seen in the *Archäologische Zeitung*. Most of the woodcuts illustrating the article *Mykenai* are taken from Dr. Schliemann's book, but several new ones are added. The majority of the figures present either an excellent reproduction of typical line engravings from standard works, both old and new, by the familiar zinc process, or else have employed the more recent and especially-adapted photographic half-tone process, made familiar to us by use in *The Century*, *Scribner's*, *Harper's* and other magazines, and the charming illustrations of many modern French books. By means of it, it has now become, as it were, impossible for any subject that will repay reproduction in this cheapest of forms to escape being harvested for the benefit of the least affluent of classical scholars and teachers, as well as for the wealthiest of amateurs. Not that it would be easy to outdo or equal what is offered in this publication; not many would find themselves able to draw for their originals on such a treasury as the Bavarian State Library, or so rich a cabinet of carefully selected photographs as that attached to the chair of Classical

Archæology in the University of Munich and slowly accumulated by such a hand as Professor Brunn. Some of the reproductions from photographs may be less satisfactory than others, most frequently owing to the poor light in which the original sculpture is situated. Perhaps the process is a little better suited to the rendering of the strong lights and shades of sculptured drapery than for the subtler surface-modelling of the nude; the pictorial effectiveness of Fig. 130, a full page plate (after a photograph from the original) of the famous Sleeping Ariadne of the Vatican, far excels that even of Fig. 1549, which gives us the Louvre torso of Praxiteles' Resting Satyr ("The Marble Faun" of Hawthorne's story) in a form on which the most extreme nicety of execution has been aimed at, owing to Brunn's recent identification of this piece as the master's original work. And these two illustrations are fair types. No small proportion of the works made accessible in these trustworthy engravings are now first published, or for the first time with any approach to veracity. Of these, *e. g.*, is the much cited but hitherto badly-reproduced sepulchral relief-portrait of Aristion by Aristokles, the earliest Athenian master of whom we possess a signed work of any sort. It is interesting to compare with this partly colored low-relief sculpture (Fig. 358) the entirely painted sepulchral stele of Fig. 935: there is no relief at all, but the dead man, whose name is given below his picture in a versified inscription, is drawn in engraved outlines, which were filled in with colors still tolerably distinguishable. The half-tone process has even been applied in polychrome work, in illustration of that much-debated subject, the polychromy of ancient statuary. Pl. XLVII shows us a Pompeian statue of Venus, in the exact coloring of the original. The genuine chromolithograph proves, however, to be more satisfying to the unsophisticated eye. The often-repeated foolishness about the unintelligibility of the architectural polychromy of the ancients when judged according to the canons of modern taste would soon receive a permanent quietus if its true character could be put before students as beautifully as it is done by Pl. XLVI. Here we have a restoration of the corner of a marble Doric temple (end of VI century B. C.). The cornice of the building is overtopped with a *simä* of painted terracotta; the colors used in its elaborate decoration are dark-red and black relieved against the ochre ground of the material itself. The decoration of the marble entablature is in bolder masses: the triglyphs are of a subdued blue, and the metopes are white. The less striking members of the architectural organism are stained a deep brownish-red. It is a pity that, aside from the above-mentioned Venus (the original of which has never impressed the visitors in the National Museum of Naples as being particularly noteworthy), no better specimen of colored sculpture could have been given than the cerulean stage-costume of Plate LVIII. If only one of the delightful clay figurines from Tanagra

could have been reproduced with the charm of its original tints! After all, if one should be asked to designate the principal ornament of Baumeister's rich pages, he would probably revert to the chastely simple pictures, replete with the true essence of Hellenic art at its strongest and best, in which the reproduction of designs from Attic vases is but incidental to the better illustration and elucidation of mythological topics. Take for instance the slaying of the Giant Polybotes at the hand of the god Poseidon, where the nervous force displayed in the action and pose of the two combatants is relieved by the pathetic figure of Ge, the mother of the Giants, who rises, with a pitiful gesture of horror, from the ground just behind the divine victor. Fig. 637 shows how the scene was rendered by the vase-painter Aristophanes. No style of drawing was ever simpler than that of the red-figured Attic vases manufactured during the fourth century B. C. in the potteries of Erginos, whose signature is coupled with that of the painter. The whole effect is attained by the contrast of two tints, black and reddened clay, which the black and gray of the photogravure represent sufficiently well. There are no gradations, as in some of the Italiote vases of later date, where other colors are introduced, but no Pheidias ever drew with greater precision, elegance, and truth. Figured vases like this, by distinguished masters of the best age of Greek art, are beginning to stand higher in the antique market than inferior marble statues manufactured in the later ages of debasement and artistic feebleness. Indeed, no complete vision of the development of Greek art can now be had without constant reference to the classified monuments of this branch of artistic creation. The collections both of Gerhard and of Lenormant-De Witte are costly works, and are becoming superseded as repositories of the choicest keramographic art known to us; the *Denkmäler* will not be without some influence in attracting more general attention to the value of Greek vases, on the part of art critics and collectors. The editor, to be sure, where he refers to specimens of painted pottery, does so with a view only to the information that may be gathered from them on the field chiefly of artistic mythology. It often happens that an ugly specimen suits his purpose quite as well as a beautiful one; and this may be said as well of the illustrations of his subject which he draws from other sources. Thus, through the varying point of view of his guide, the student is enabled to obtain a broader and more impartial presentation of the panorama of antiquity as we know it from its concrete remains than he can by the methodical study of the systematic handbooks. A general conspectus of this particular subject is given under the proper heading of *Vasenkunde*, i. e., "Keramics," or rather (to coin an exact equivalent) "Vaselore." It has been assigned to a competent young specialist, Von Rohden.

The general scheme of collaboration embraces contributions from some twenty approved connoisseurs. The juxtaposition of names like those of

ARNOLD (*Scenic Antiquities*), BLÜMNER (*Private Antiquities, with Agriculture and The Arts*), DEECKE (*The Alphabet and Etruscan Antiquities*), VON JAN (*Music and Musical Instruments*), WEIL (*Numismatics and the Portraiture of the Roman Emperors*), WÖLFFLIN (*Palaeography*), etc., is of itself a sufficient guaranty of the high level maintained. The articles on mythology, and on the portraiture of historical personages, with sundry unclassified miscellanies, fell to the share of the editor, who has little need to apologize, as he does in the preface, for his lack of special training in archæology. His articles, taken together with those on ancient architecture, sculpture, and painting, contributed by Julius and Von Rohden, aided latterly (the subjects of architecture and sculpture together having proved too much for Julius) by our countryman Ch. Waldstein, form by far the most satisfactory compendium of Greek and Roman art that has yet appeared.

One of the most noteworthy among the single articles is that by Professor Flasch of Erlangen in which he sets forth the results of the German excavation of the site of Olympia. A separate reprint of the same would constitute a pamphlet of no mean dimensions; it exceeds its set limit of fifty pages by nearly one hundred per cent. In 184 columns of close print, Flasch has room to discuss "The Situation of Olympia;" "The History of the Festival and Settlement;" "The Track of Pausanias," whose description was the principal guide of the excavators; "The Buildings of Olympia;" and, finally, its numerous statuary. We cannot enter into detailed criticism here—but the resumption by Flasch of the theory of the Attic character of the sculptures of the temple-pediments, and his rejection of Brunn's captivating and reasonable hypothesis, which ascribes them to the Northern Greek School in which both the collaborating sculptors, Paionios and Alkamenos, had been bred, shows how far archæologists still are from a general agreement on the discussion started by the discovery of the Nike of Paionios in 1875. Flasch then falls into the *seicento* absurdity of ascribing any particularly striking sculptural composition to the chisel of Pheidias himself. According to him, it is altogether reasonable to suppose that Pheidias must be credited with the invention, if not with the material execution, of the whole plastic decoration of the Olympian temple! One fails to understand why we are systematically to reduce Paionios and Alkamenos, two of the most distinguished artists of all antiquity, to the functions of mere journeymen. But, later on, Flasch makes amends to one of these sculptors in a spirited appreciation of an independent composition, the above-mentioned winged Nike. Here, some of his sentences have the authority and ring of Winckelmann's own.

A brief account of the inception of the whole publication will give the clearest idea of its scope. American scholars are often heard, after their return from a few years of study at one or other of the great German uni-

versities, to lament the absence at home of the unlimited facilities for investigation to which they have become accustomed abroad. Few, perhaps, reflect that nineteen-twentieths of their German fellow-students, after an equally brief or even briefer sojourn among the museums and libraries of Berlin, Munich, or Vienna, find their professional engagements at small country colleges often in no wise better equipped than our own, making fully equal exactions on the time of their instructors, and practically quite as remote from the coveted facilities of the metropolitan university. The plan of the "Monuments of Classical Antiquity" was drawn up with special reference to the needs of these teachers. This does not exclude an appeal, both through them and besides them, to cultivated lovers of antiquity of all classes, notably among artists, collectors, and literary amateurs. No one, in these days, can be expected to take all the publications devoted to the elucidation of the concrete side of antiquity, and the reporting of the almost daily discoveries made in this field. Still less can any individual dream of owning all the sumptuous and costly folios that illustrate the topography of ancient cities and the varied marvels of ancient art. Too many of these works are out of print, and can therefore be obtained, if at all, only at fancy prices. Now the attempt has indeed been made at sundry times and in divers places to comprise in one publication either the whole field or the most captivating aspects of what the French so aptly term *l'antiquité figurée*. Bernard de Montfaucon's celebrated *L'antiquité expliquée et représentée en figures*, which appeared in fifteen folio volumes between 1719 and 1724, was the first comprehensive work of this sort. Its modern parallel, Daremberg and Saglio's great *Dictionnaire*, gives little promise of advancing far beyond the first three letters of the alphabet. The idea of a selection predominated in Winckelmann's *Monumenti antichi inediti*, and in the splendid old *Monumenti dell' Instituto*. The apt name of "Monuments" for a selection of similar plan recurs in the title of two recent undertakings limited to the reproduction of very choice antiques in the finest style the rich resources of modern photographic processes can command: Rayet's *Monuments de l'art antique* and Brunn's magnificent collection, at this moment in process of formation, which bears the name "*Monuments of Ancient Sculpture*." Brunn's folio plates exhibit the art of heliotype work at its best, the text being confined to the limits of a *catalogue raisonné*. What is peculiar to the present publication is the strikingly equal proportion observed between illustrations and text, and above all the arrangement of the separate titles in the convenient alphabetic order. This is an innovation in archaeological handbooks, and presupposes some acquaintance, on the part of the user, with the names of ancient artists as associated with their works.

ALFRED EMERSON.

Lake Forest University.

ÉTUDES D'ARCHÉOLOGIE ET D'ART, par OLIVIER RAYET, *etc.*, réunies et publiées, avec une notice biographique sur l'auteur, par SALOMON REINACH, et illustrées de 5 photogravures et de 112 gravures. 8vo, pp. xvi-451. Paris, 1888. Librairie de Firmin-Didot et C^{ie}.

Olivier Rayet (born 1847, died 1887) began his archæological work by an extensive trip through Greece, the Islands, Asia Minor, Syria, the Danubian provinces, and Turkey in Europe. In 1870 and 1871 appeared his first writings, and it was then that he began his famous private collection of antiquities, and secured for the Louvre the greater part of its series of the newly-discovered Tanagra terracottas. His continual purchases and dealings with matters of practical archæology gave him a rare knowledge of works of art, in judging which he combined the knowledge of the archæologist with the taste of the born artist and the carefulness of the practical worker. With the financial assistance of the Rothschilds he executed in 1872 and 1873, amid a thousand difficulties and hardships, the excavations at Miletos. In 1874, he succeeded Beulé in his archæological professorship at the Bibliothèque Nationale, and soon after was made associate Director of the *École pratique des Hautes Études*, where he taught Greek epigraphy, ceramics, and Athenian topography. In 1879, he succeeded Foucart in the Collège de France, and, at the time of his death in 1887, had reached the most fruitful part of his career, preparing a *Topography of Athens*, a *History of Greek Sculpture*, the great monograph on Miletos, and the *History of Greek Ceramics*, lately finished and published by his friend, M. Max. Collignon. The most popular and well-known of his works is that entitled *Monuments de l'Art Antique*, which contains such admirable monographs and reproductions of the finest works of Egyptian and Greek art. Although cut off at the time when he was only beginning to occupy himself with works of considerable extent, M. Rayet has left many writings, and all that he wrote is of value. They are to be reprinted, with but few exceptions, in two volumes. That which is before us includes the short papers that have but little show of erudition: the second will comprise his memoirs on the Island of Kos and on Greek Epigraphy. These papers are reprinted from the *Gazette des Beaux-Arts*, *Gazette Archéologique*, *Monuments Grecs*, *Bulletin des Antiquaires*, and *Bulletin de Correspondance Hellénique*. They are accompanied by all the original plates.

The subjects of these essays are varied, but, with some exceptions, are confined to Greek archæology. The contemporary excavations are carefully criticized, especially those at Dodona, Olympia, Asia Minor, Hissarlik, Samothrake and Tanagra. There are several monographs on Greek architecture and sculpture; several reviews of important books, like Chipiez on the Greek Orders, and Benndorf on Greek and Sicilian Vases; several

studies of museums, like those of Berlin and Saint Petersburg, the latter giving him the opportunity for an interesting and valuable study on the Greek art and antiquities of the Bosphoros. Finally, there are sympathetic sketches of the lives and works of two great scholars, Adrien de Longpérier and François Lenormant. The whole volume is charming. The writer has a fascinating style and forcible thought, and carries the reader with him.

A. L. F., JR.

HISTOIRE DE LA CÉRAMIQUE GRECQUE, par OLIVIER RAYET, Professeur d'archéologie près la Bibliothèque Nationale, et MAXIME COLLIGNON, chargé du cours d'archéologie à la Faculté des Lettres de Paris. 4to, pp. xvii-420. Paris, 1888, Georges Decaux, Libraire-Éditeur.

The introduction and chapters x, xiv-xxii (end), or about one-half the volume, are entirely due to the pen of M. Max. Collignon, on whom devolved also the selection of the illustrations and the editing of the whole. Rayet, at the time of his death, had not brought his work to a state of completeness, even for the first part of the volume (chs. i-ix, xi-xiii). "His idea was to address the book to the same public of educated amateurs for which he had written his sumptuous *Monuments de l'Art Antique*; he wished a clear and substantial work that should initiate a wider public than that of the learned into the recent discoveries of a science of which he was a thorough master." As M. Collignon adds, we find here the exact and sure learning, delicate taste, deep artistic sense, and personal style which make all his writings so attractive. French writers have an ability far superior to that of any other nation in marshalling an army of facts into line, giving to each its proper position and relation, eliminating all that is superfluous, and then vivifying these facts by a broad and comprehensive judgment, a clear and simple presentation, and a judicious method. Such qualities are conspicuous in this book. It is the first attempt to write a general history of Greek ceramics in any language. Such attempts usually fail in some respects; this is an instance of remarkable success. The method employed may be partly gathered from an enumeration of the chapters: i, The first attempts; ii, Geometric ornamentation; iii, Oriental influence in Asiatic Greece and the islands; iv, Oriental influence in Boiotia and at Corinth; v, The Corinthian *ateliers* in Italy; vi, Oriental influence in the rest of Greece; vii, The unification of styles—The Athenian manufactures in the sixth century; viii, Black-figured vases; ix, Panathenaic amphorae; x, Painted terracotta plaques; xi-xiii, Red-figured vases—(1) Euphronios, (2) Sosias, Brygos, Panphaios, (3) Makron, Hieron; xiv, Vases with white background; xv, Red-figured vases of the fourth century—Vases with gild-

ing and colors; XVI, Vases decorated with reliefs, and vases in the shape of figurines; XVII, Red-figured vases of the Macedonian period—Manufactures of Greece proper; XVIII, Vases of Southern Italy; XIX, The end of vase-painting in Italy; XX, Imitation of metal, and moulded pottery; XXI, Varnished and enamelled pottery; XXII, Keramics in architecture.

This variety of subject and period is treated with perfect exactitude in regard to facts, and with sobriety of detail. Of course, an archæologist would be disappointed if he were to expect to find a wealth of details in any one branch he might be investigating. It must be said, also, that the authors, while not shrinking from adding to the already manifold theories in regard to the origin and early development of Greek keramics, do so with good judgment. Two late and important discoveries—of Egypto-Greek pottery at Naukratis, and of early red-figured pottery on the Akropolis—both of which somewhat modify previous ideas, are noticed in the appendix. The illustrations are good and not few, and yet, in view of the variety and quantity of material, they seem insufficient. One very practical point has been omitted: no good idea is given of the great quantity of vases found, where they were found, and what are the finest public and private collections. We also feel the need of some tabular chronological statement of the classes of monuments and of known artists; perhaps, also, of a little more systematic treatment throughout. It might have detracted from the readable qualities of the book, but would have made it easier of reference. In the same line of criticism, we would suggest, as essential, a detailed list of the various forms of vases, with names and outline drawings. The forms are so varied that, one of the first things necessary to a student is, to become perfectly familiar with them. Among omissions of classes of vases we would suggest that of a series of Latin vases with Latin inscriptions, imitations of the Attic style, of which Gamurrini treated in the *Bull. dell' Istituto*, 1887, pp. 221-34. This series is of extreme importance, both as being a survival at a time when vase-painting was everywhere drawing its last breath, and especially as giving us some idea of Roman art before the conquest of Greece, when Rome had long since shaken off Etruscan influence and come under that of Southern Italy.

A. L. F., JR.

CHRISTIAN ARCHÆOLOGY.

CHRISTIAN ARCHÆOLOGY, by CHARLES W. BENNETT, D. D., Professor of Historical Theology in Garrett Biblical Institute, Evanston, Illinois (Library of Biblical and Theological Literature, vol. IV). 8vo., pp. xvi-548. 1888, New York, Phillips & Hunt; Cincinnati, Cranston & Stowe.

This volume treats of Christian archæology in its broadest definition, as including not only the art but the constitution, worship, and life of the

early Christians: in fact, as it only excludes political history, of which there is not much within the Christian sphere during the greater part of the period, it may be said that all the main elements of the Christian development of the first three or four centuries are successively studied. This necessitates brevity of exposition. The first book is devoted to the *Archæology of Christian art*, and is divided into chapters on the geography and chronology of the monuments, on the relations of Christianity to art during the first six centuries, on the symbolism of Christian art, on painting, mosaics, sculpture in stone and bronze and ivory, the basilical and domical forms of architecture: the concluding chapters are on epigraphy, poetry and hymnology and music. This first part of the work is especially new in American literature, and introduces into our studies a most useful and important element; one which makes our realization of the life and customs of the early Christians far more vivid than does any other branch of the history of the Church. On account of this fact, the author devotes to it more than half the present volume, treating in a more summary manner the better-known subjects of the origin, composition, discipline and history of organization of the early church (book II); its sacraments and worship (book III); and, finally, the archæology of Christian life (book IV), including the family, the question of slavery, of participation in civil and military life, of charities, education and culture, and of the care of the dead. The last subject would equally belong, strictly speaking, within the sphere of the archæology of art, as it deals especially with the Catacombs.

A. L. F. JR.

L'ARCHITECTURE ROMANE, par ÉDOUARD CORROYER, architecte du gouvernement, inspecteur général des édifices diocésains (Bibliothèque de l'enseignement des Beaux-Arts. 8vo, pp. 320. Paris, 1888, Quantin.

In the series of small volumes devoted to the history of the Fine-Arts, which have been issued periodically from Quantin's presses during the last six or seven years, one on Romanesque architecture holds an important position. In the Romanesque Period, architecture was the only one of the fine-arts which was almost invariably the expression of æsthetic perceptions, an embodiment of the sublime and the beautiful; and, though the Gothic style is more popular, that of the preceding epoch is, to many, æsthetically preferable as well as more instructive. In his introduction, M. Corroyer mentions the scholars, like Viollet-le-Duc and Quicherat, who have done most to advance the study, discusses the propriety of the term *Romance* or *Romanesque*, and defends the course of seeking for the source of that architecture in the buildings of earlier Christian centuries, and of confining the

study in this sketch to the religious buildings. Exactly one-half of the volume is occupied with a cursory study of the styles preceding the Romanesque—Latin, Syrian, Byzantine, Carolingian, *etc.*—beginning even with the civil constructions of Imperial Rome. The second half deals with Romanesque proper, and contains the following chapters: on baptisteries or rural and funerary chapels; on churches of basilical shape; round or polygonal churches; vaulted churches. Within these chapters the writer passes in review a large number of edifices, sometimes grouped according to schools, and almost invariably belonging to France. The illustrations are very good and quite numerous. If the book creates a sense of dissatisfaction and, even to a reader familiar with the subject, of confusion, the reason is not far to seek. No clear method and plan, no logical sequence, no grasp of general facts or ideas, can be discovered. Much valuable space is wasted by the study of pre-Romanesque architecture as a whole, instead of in its relations with Romanesque only: nowhere is the development of the different parts of the church given: no account is taken of national variations within the Romanesque, as no style but that of France is treated except incidentally. It is to be hoped that in a new edition M. Corroyer will modify his plan fundamentally, else the book is likely to fail in its prime object—that of giving a clear and simple view of the acquired results in the field, without devoting any considerable space to the discussion of such well-worn and doubtful subjects as that of Byzantine influence. Why not adopt some method of classification by systems of vaulting, like that of Quicherat, or by schools, like that of Viollet-le-Duc and Anthyme Saint-Paul? However, in a conspectus of this sort, the reader ought certainly to be shown in what particulars the Romanesque of Germany, Italy, and England, not to mention other countries, varied from that of France.

A. L. F., JR.

THE RENAISSANCE.

LES COLLECTIONS DES MÉDICIS AU XV^e SIÈCLE. LE MUSÉE—LA BIBLIOTHÈQUE—LE MOBILIER (Appendice aux *Précurseurs de la Renaissance*), par EUGÈNE MÜNTZ (Bibliothèque internationale de l'Art). 4to, pp. 111. Paris, 1888, Librairie de l'Art.

The writer had already, in previous works, touched on the history and vicissitudes of the famous Medicean collections, and traced the pedigree of a number of special pieces. The greater part of this volume is occupied by documents, mostly here published for the first time. They are mainly inventories of the Medici collections at different periods, and are of more than usual value, not only historically, but as likely to form in the future a fruitful means for the identification of important pieces in our museums

whose pedigree has not yet been traced. The documents are generally taken from the Florentine archives.

Cosmo, the "Father of his Country," was the first to collect works of art, as is here shown by a number of letters and other documents: his collection, however, never grew to any great size. The real founder of the Medicean collections was the much-maligned Piero, his son, who seems at least to have had the merit of being an appreciative and liberal patron of art. This is shown by the inventories of his collection dated 1456 and 1463: embroideries, tapestries, silverware, jewelry, damascened work, arms and armor, medals, works in *pietra-dura*, costly manuscripts—these are the categories enumerated. Especially remarkable was his great collection of engraved gems and cameos, the admiration of his contemporaries. The founders of the Renaissance sought inspiration among the jewels of Piero's collection, as the second generation, in the second half of the century, did from the collections of Lorenzo. From the Medicean collections proceeded much of that classic influence in sculpture, shown by the way in which Donatello, Michelozzo, and so many artists of Northern Italy at this period reproduced antique gems and cameos in larger marble sculptures.

The climax was reached by Lorenzo *il Magnifico*. The inventories show him to have had a most catholic taste, and that he patronized and fostered not only the new school of classicists, and the rising naturalists, but especially the men who represented the religious side of the new period. So his palaces are filled with the works of the greatest painters of that and preceding generations: Giotto himself and Domenico Veneziano; then Masolino and Masaccio, of the psychological school; Paolo Uccello, Pollajuolo, and Andrea del Castagno, of the realists; Squarcione, of the classicists; Fra Angelico, the leader of the religious painters, not to mention others, like Fra Filippo Lippi and Pesellino. Verrocchio worked for him, and so did Botticelli and Domenico Ghirlandaio. Especially remarkable is the fact of his possessing a number of works of the School of Bruges, including two by Jan van Eyck. Among the sculptors are Donatello, Bertoldo, Mino, and Desiderio da Settignano.

The catholicity of the taste of Piero and Lorenzo is shown by nothing more clearly than by their large collection of Byzantine portable mosaic-tablets, of which they possessed many more than now exist in the united collections of Europe. It is amusing to note the difference in the estimation of various classes of works, as shown by the valuation put upon each article in the inventories, some of the cameos being valued as high as 3,000 crowns, while none of the paintings are placed at a higher valuation than 300, most of them between 30 and 50.

The last documents in the volume are a sad commentary on the history of the times. They relate to the destruction of the collection, which came

about in three ways, at the time of the expulsion of the Medici in 1494-5: many of the smaller objects were looted by the populace before the tumult was quelled; many were expropriated, many sold at public auction. Piero II, on his return, succeeded in re-acquiring only a small number of pieces, melancholy relics of the splendid collections of his predecessors, which have only recently been rivalled by the great museums in European capitals. M. Müntz has rendered an important service by the publication of these documents and added another item to the great debt we owe him.

A. L. F., JR.

LA CÉRAMIQUE ITALIENNE AU XV^e SIÈCLE, par ÉMILE MOLINIER, attaché au Musée du Louvre. 18mo, pp. ix-88. Paris, 1888, Ernest Leroux.

After calling attention to the fact that students of Italian Keramics, except Darcel and Fortnum, have belonged either to the class which merely study documents, or to that which writes small monographs, and that everything is yet to be accomplished in regard to the history and classification of this branch of Italian art, the writer proceeds to attempt a classification of the works of the xv century, without which no understanding of the more important and beautiful works of the xvi century is possible. While recognizing the Oriental origin of the industry, the writer calls attention to the fact that not a single known Italian work is a direct imitation of an Oriental model. Every work whose age is certified by date or arms or emblems as being within the xv century is here catalogued: the arrangement is chronological, as very few can be classified according to schools and localities. For this period there are but few of the dishes like those produced in such quantities during the succeeding period: the works that remain are mainly ornamental or revetment plaques or enamelled tiles for pavements. The earliest mentioned are clearly imitations of Oriental works, in the church of San Giovanni a Carbonara at Naples, about the tomb of Gianni Carracciolo († 1432), for which the date c. 1440 is proposed: the series continues almost uninterruptedly from the middle to the close of the century. The greater part are posterior to 1480. The chief centre of this branch of art in North Italy was Faenza. The most important work of this School is the pavement of a chapel in San Petronio at Bologna, executed in 1487. Another series of the close of the century or the beginning of the next is attributed to a Tuscan School, perhaps that of Caffagiolo. M. Molinier is a specialist in researches of this kind and for this period, and his work is conscientiously done. Like his work on the *Plaquettes* of the Renaissance (see vol. III, 397), this work treats of a little-known subject, but one highly characteristic of the time.

A. L. F., JR.

PREHISTORIC ARCHÆOLOGY.

ARCHÉOLOGIE PRÉHISTORIQUE, par Le Baron J. DE BAYE. Avec 51 figures intercalées dans le texte (Bibliothèque scientifique contemporaine). 18mo, pp. 337. Paris, 1888, J. B. Baillière et Fils.

The writer's object is to give a succinct and faithful statement of the present state of prehistoric archæology. He begins by showing how sadly its reputation has suffered at the hands of zealous but poorly-equipped and unscientific scholars, hastening to bend facts to their preconceptions; also, that its classifications have been inexact, some being based on palæontology, some on anthropology, some on geology; the result being a hybrid pseudo-science, without unity or rational basis. Hence it has been falling into disrepute among serious students of archæology and history.

Discarding "tertiary" man, M. de Baye starts with the quaternary period, for which he uses the term *paleolithic*, and pronounces himself in favor of attributing certain burial-places to this period, including some pottery as well as rock-sculptures. For the following period he uses the term *neolithic* rather than *age of polished stone*; the period when artificial caves were made, lake-dwellings and covered alleys; when animals were domesticated, instruments made of other stones besides silex, industries were developed, and culture reached a higher plane either by development or by the incoming of a higher race. The writer finds in this period three "expressions" or phases: (1) the artificial caves; (2) the lake-cities; (3) the megalithic monuments—each of which he takes up in detail. As M. de Baye's studies have been confined almost entirely to his native land, we are not surprised to find special chapters on the stations of the Marne and on the caves of the Champagne. Occasionally, M. de Baye shows his wider knowledge by references to important Scandinavian, North-German, or Italian monuments. There is an interesting chapter on prehistoric trepanning, and one on anthropological data. The rest of the volume is taken up with studies on arrow-heads, on hatchets, on instruments found in the grottos, on ornaments, and on ceramics.

However one may differ from the writer on some of his conclusions, his long practical experience and discoveries, his keenness of observation, and his faculty for classification, make his book alike interesting to the uninitiated seeking for a clear and simple exposition of the subject, and to the specialist who wishes a good statement of the acquired facts of prehistoric archæology.

A. L. F., JR.

ARCHÆOLOGICAL NEWS.

SUMMARY OF RECENT DISCOVERIES AND INVESTIGATIONS.

	Page.		Page.		Page.
ASIA MINOR,	455	GERMANY,	518	RUSSIA,	522
AUSTRIA-HUNGARY,	520	GREECE,	491	SICILY,	511
CENTRAL AMERICA,	529	HINDUSTAN,	475	SPAIN,	514
COLOMBIA,	530	ITALY,	502	SYRIA,	483
DENMARK,	522	KRETE,	502	TUNISIA,	473
EGYPT,	472	KYPROS,	488	TURKEY,	523
ENGLAND,	523	PALESTINE,	482	UNITED STATES,	528
FRANCE,	515	PHOENICIA,	483	WALES,	527

AFRICA.

EGYPT.

PRESERVATION OF MONUMENTS.—Under the auspices of many artists and antiquaries, including Lords Wharnclyffe and Wemyss, Sir F. W. Burton, Sir A. H. Layard, Sir F. Leighton, and Mr. Alma Tadema, Mr. Armstrong, Mr. Colvin, Mr. R. S. Poole, Mr. Poynter, and Mr. Henry Wallis, a society has been formed entitled "Committee for the Preservation of the Monuments of Ancient Egypt." These relics have been a subject of anxiety to antiquaries, and recent travellers have reported emphatically that unless immediate steps are taken to save them, by reparation and otherwise, the speedy destruction of the ancient buildings of the Nile Valley is inevitable. The society proposes to bring the facts before the public generally, and to endeavor to induce the authorities to arrest the ruin. Mr. Poynter is the honorary secretary.—*Athenæum*, Dec. 8.

EGYPT EXPLORATION FUND.—At a committee meeting of the Egypt Exploration Fund, held in London early in December, a report was read from M. Naville setting forth his views as to the work to be done during the present season. He proposes to return once more to Boubastis, so as to entirely complete the excavations carried on there for the last two seasons and ensure a scientific exploration of the site.

The annual meeting of the Fund will be held in London in January.

PUBLICATION OF TANIS II.—Messrs. Trübner have published, for the Egypt Exploration Fund, the second part of *Tanis*, dealing also with Nebesha and Taphenes (Daphnae). The text is written by Mr. W. M.

Flinders Petrie and Mr. F. Ll. Griffith; and the work is illustrated with no less than sixty-four plates.

CAIRO.—*Bûlâq Museum.*—The ground and buildings of the Bûlâq Museum, together with the house of the director, were to be sold by public auction on Dec. 8. The house will be made over to the purchaser in six months and the museum buildings in eighteen months. It is decided that the collection be deposited at the Palace of Geizeh. This means that students who go to Cairo to work at the museum will be put to the expense of sixteen shillings a day for carriage hire, and, as some gentlemen work there for three or four months at a time, the additional expense will be a serious item in the cost of the journey. The removal shows the regard for the convenience of students felt by the British officials at Cairo, for without their consent the change could not have been made. It should be stated that the director's house was built only two years ago.

Photographs of illuminated Korans.—Students of Oriental art will be glad to know that Count d'Hulst has received permission to photograph the magnificent illuminated pages of the Korans in the public library of Cairo. They will form an important addition to the comprehensive series of studies in Cairo art on which he is at present engaged.—*Athenæum*, Dec. 8.

MITRAHENNY.—The results of M. Grébaut's excavations here, during the past months, are five statues of kings of ancient dynasties, together with the cartouche of a hitherto unknown queen.—*Athenæum*, Nov. 17.

TUNISIA.

BÉJA.—A terracotta brick found at Béja bears, in relief, a scene in which are to be seen a horse and three personages. According to M. Clermont-Ganneau, this scene is that of Pegasus tended by nymphs, a subject already represented in a Pompeian fresco.—*Paris Temps*, Aug. 25.

CARTHAGE.—*Excavations in a Roman cemetery.*—Abbé Delattre gives in the *Revue Archéologique* (1888, II, pp. 151-74) a report on the excavations carried on by him in one of the Roman cemeteries near Carthage in 1888. Among the pagan cemeteries located outside the city, two, situated n. w. near the ramparts and the amphitheatre, are of especial interest: they date from the first and second centuries, and received the ashes of the members of the imperial household who were placed by the Emperor at the service of the procurator of the *Tabularium* of Carthage. The number of epitaphs found up to the present is about six hundred. Both cemeteries contain tombs of shapes very seldom found in the Roman empire. Each cemetery consists of an area of about one thousand square meters, entirely surrounded by a wall and full of square cippi usually 1.50 met. high and between 0.50 and 1 met. wide. These cippi are built of masonry and contain one or

more funerary urns, which are placed in communication with the outside by a pipe and thus made to receive the libations of the relatives and friends of the defunct, which, after reaching the funerary urn and passing among the bones, often trickled into a lower niche containing coins, lamps, pottery, etc. The tube served also to carry down to the funerary urns the burnt remains of the defunct, who sometimes had the monument erected during his or her lifetime (*se vivo aram fecit*). Thus the monument was a veritable altar: each cippus is covered with a coating on which are moulded in relief or painted ornaments such as colonnettes, capitals, garlands, flowers, various symbols, heads, figures, funerary genii, birds and animals. The marble tablet with the epitaph is usually placed on the front, a few centimeters below the upper cornice. Sometimes the bodies were not cremated but buried, and then the tomb took the shape of a half-cylinder resting on a square base. One of these is especially remarkable. On the base is painted a funerary genius in the shape of a child reclining and leaning his head on his right hand, while in his left he holds a cock's head from which the blood flows. It contained (1) a vase in the form of a cock, and a block of plaster in which was moulded the body of a child of the same age, appearance, and position as the painted genius: within it were a few bones. Evidently the body of the child was deposited in the liquid plaster. In the recent excavations, 276 lamps came to light: many of them are of fine style. The total number of epitaphs is 584—one in Greek (of a philosopher); all the rest in Latin, of which only two are versified. In the first cemetery, 187 are of men and 100 of women; of whom, 130 are slaves (103 men and 23 women) and 15 freedmen: in the second cemetery there are 160 men and 135 women, of whom 110 are slaves and 19 freedmen. The list of functions is useful as showing the composition of the Tabularium of Carthage under the procurator whose *officium* they formed. The explorer throws doubt upon the exactitude of the ages attributed to the defunct in the epitaphs, on account of the manifest prepossession in favor of round numbers, like 30, 35, 40, 45, 50, etc.: e. g., twenty are said to die at the age of 60, while there is only one for all the four preceding years and two for the four following years. He suggests that the ages in Roman epitaphs are mainly approximative. All the inscriptions, lamp-marks and brick-marks, etc., are then published.

Christian Lamps.—M. le Blant calls attention to the finding of four Christian lamps with subjects not yet observed: a bearded man, standing (St. Peter ?); Christ holding a cross with two worshippers; Christ holding the cross and treading on the devil and the seven-branched candlestick, symbol of vanquished Judaism.—*Chronique des Arts*, 1888, p. 259.

ASIA. HINDUSTAN.

INDIAN EPIGRAPHY.—Part I is just issued of a new and important work entitled *Epigraphia Indica: a Record of the Archæological Survey of India*, edited by Dr. Jas. Burgess, head of the Archæological Survey, together with his assistants Messrs. Führer, Hultsch, Rea, and Cousens. This part will contain several valuable inscriptions published under the editorship of Drs. Bühler, Kielhorn, and Hultsch. Part II will be issued in December.—*Athenæum*, Nov. 24.

ARCHÆOLOGICAL SURVEY REPORTS.—Dr. A. FÜHRER, Assist. arch. Surveyor, communicates a *Progress Report on N. W. P. and Oudh Circle, Oct., 1887–Jan., 1888*: comprising surveys in the districts of *Partābgarh, Alāhābād, Rāi Barēli, Unāo, Fatehpūr, Kānpūr, Hardoi, Shāhjāhānpūr*. Among the interesting monuments reported on, we select the following:—

SANKARPÜR (Rāi Barēli).—This hamlet is perched on the north side of a large brick mound, extending over a mile in length and breadth. The mound is surrounded by a deep ditch, which widens into a large sheet of water on the north side. In the middle of the mound there are the remains of a large brick stūpa, with a diameter of not less than 70 feet. Numerous traces of solid brickwork and large quantities of terracotta figures and Buddhist coins prove the great antiquity of the place. On topographical grounds and from a calculation of distances, Dr. Führer identifies this place with the Oyuto of Hiuen Tsiang.

TUSĀRAN-BIHĀR (Partābgarh) on the northern bank of an old bed of the Ganges. The old town of Bihār stands on a mound rising to 20 ft. in its highest parts. There is a little fort at the southwest angle, near which is a small brick temple containing a group of figures, apparently belonging to the Indo-Scythian period, as the females are naked to the waist and wear broad zones of several strings round the loins, like those in the Sānci sculptures. To the southeast of the town there is a very extensive mound of brick ruins about half a mile in length, with a detached mound at the east end called Tusāran, which is probably meant for Tushārārāma, or the "monastery of the Tushāras."

GAURA, a small village three miles to the east of Tusāran-Bihār, has the ruins of a small but richly carved temple of Sūrya: the walls entirely of brick, the entrance doorway of stone. In plan it is a square of 21' 8", with a chamber of 11 ft. square. The walls are decorated with deep carvings of the flower and leaf pattern. The doorsill has the usual lions and elephants, and, in the middle, a figure of Sūrya seated in a chariot drawn by seven horses. The temple cannot be older than the ninth or tenth century.

TINDULI (Fatehpūr).—To the west of the village is a very interesting

brick temple-tower of the tenth century. The cella is of stone, in the same style as the Mahobâ and Khajurâho temples, the sikhara which surmounts it is of elaborately moulded brick. Of the original stone porch only a few fragments remain. In plan it is a polygon of twenty-four sides externally standing on a circular plinth, with a square chamber ten ft. in diameter.

Dr. Führer surveyed the banks of the *Arind* river (Kânhpûr) in search for brick temples similar to those of Bâri-Bhitari, illustrating the brick architecture prevalent in the Doâb during the ninth and tenth centuries. Instances of it were found at Parauli, Râr, Simbhuâ and Bedâ-Bedaunâ.

PARAULI.—This village possesses a pretty little temple, which is imperfect, about one-half of it having fallen. In plan it is a polygon of 18 sides, externally standing on a circular plinth, with a circular chamber 6' 8" in diameter. The chamber is covered with a pointed dome, built with bricks end to end, and there is a second domed chamber above to lessen the weight on the walls. Outside, this temple is decorated with moulded bricks of the flower and leaf pattern from top to bottom.

RÂR possesses two small brick temples of the same date as those already mentioned. The largest is built on the same plan as the Bâri-Bhitari temple, but on a smaller scale, measuring externally only 18 feet by 12 feet. The other is a polygon of 12 sides standing on a circular plinth with a square chamber 10 by 9 ft. Both temples are richly decorated with the arabesque ornament and with numerous figures in terracotta.

SIMBHUÂ.—The brick temple is unfortunately thickly covered with plaster on the exterior surface. On many places where the plaster has peeled off the same flowered ornament is visible as that of the Parauli and Râr temples. Inside, the cella is of moulded brick and a square of 12 ft.

BEDÂ-BEDAUNÂ.—The brick temple is exteriorly covered with whitewash, but occasionally carved bricks and square beaded panels with hood mouldings are visible. In plan it is a square of 47 ft., with the corners indented, and two vaulted antechambers. The vaults rise from imposts and are built with the bricks placed edge to edge. The cella is 20 ft. long and 14 ft. broad and supported on eight tall columns richly ornamented, the architraves and ceiling being decorated with leaf ornaments and alto-relievos. The most characteristic feature of this temple is the employment of the semicircular arch between the two antechambers. Judging from its style, the temple cannot be placed later than the seventh or eighth century, and is probably older.

RÂMKOT (Unâo), also called *Sanchânkot* and *Sujankot*, on the south bank of the Sâl river. There is a fort-mound nearly a half-mile square. It was, no doubt, occupied at a very early date, being on the highroad between Kanauj and Ayodhyâ. To the south of the fort there is another mound with the remains of a brick stûpa 20 ft. in diam., standing on a lofty ter-

race 60 ft. square with a surrounding wall 6 ft. thick. It is built of very large wedge-shaped bricks, slightly curved outside, evidently made for the purpose. The coins found in these two mounds are of the oldest-known kinds, both punch-marked and cast.

BÂNSÂ (Hardoi).—To the east of the village lies a large mound covered with broken bricks and pottery, on the summit of which stands a small stone temple of the tenth century, with an image of Pârvati, locally called Bânsadevî. The ancient coins, which are found here in considerable numbers, show that the place must have been inhabited long before the Gupta era.

MÂTÎ (Shâhjâhân-pûr).—42 miles northeast from Golâ Râipûr, the deserted site of a large old city, now covered with dense jungle. The ruins extend for two miles in length and one mile in breadth, and the whole area is covered with large bricks, measuring 18" \times 12" \times 6", many of which are inscribed in characters of the eighth century. In many places the walls of buildings are still rising up to 10 ft. above the ground. Inside the jungle are a number of octagonal wells, built of large bricks. The whole city was surrounded by an outer and inner wall, and a deep ditch on all sides. At a short distance, northwest of the old town, is a large tank of one mile in length, with pakka ghâts all round, leading to the edge of the water. On the east side of the tank is a high brick mound, the ruins of a large square temple with a lingam still standing in the sanctum. From this emblem of Sîva the neighboring village is named *Mahâdeva*. The antiquity of the place is attested by the number of old coins that are found amongst its ruins. These include some punch-marked bits, punched and cast Buddhist coins, those of the Indo-Scythian kings Huvishka and Kanishka, and coins of the Indo-Sassanian period. The money of the Musalmân kings is even more common from the time of Muhammad-bin-Sâme down to Sikandar Lodî. This unbroken succession of the different coinage shows that the place must have been occupied continuously from the very earliest times.

BENGAL (Government of).—The *Bengal Administration Report for 1886-7* states that the archaeological operations of the year were a continuation of the previous year's work. At **SASSERAM** the tombs of Sher Shah and his father, Husain Khân, were measured and some drawings prepared. The palaces, temples, and gateways in the fort of **ROHTASGARH** were also partially measured. The remains of numerous temples, buried under mounds of earth, were discovered at **KANT**, in the Shahabad district. A report on the temple of **UMGA** in the Gâya district, with complete technical drawings, was submitted to Government.—*Athenæum*, June 23.

MADRAS (Government of).—A. REA, Arch. Surveyor, *Progress Report, April 30, 1888*; accompanied by 34 scale-drawings, 12 photos, 131 facsimiles of inscriptions. We select the following:—

BEZVÂDA.—**ROCK-CUT TEMPLES**.—Five cave-temples and one buried

monolithic temple are described: Mr. Rea, after an examination and comparison of these with numerous similar works at Mamallapuram and other places in the Madras Presidency, is inclined to place these at about the beginning of the VI century A. D.

Cave Temple No. 1.—This cave, a short distance up the S. E. face of the *Arjunakonda hill*, is cut under an overhanging ledge of rock, and was blocked up with mud to within a few feet of the roof: holes had to be dug at certain points to ascertain the heights of the piers and the formation of the front base-mouldings of the shrines. The cave is unfinished, and shows great massiveness in its supports, and an almost entire absence of ornament in its design. In Mr. Rea's opinion, its age should be fixed at about 500 A. D. The present plan is an extensive portico of two rows of six massive piers, with side-responding pilasters having stop-chamfers on the top of the angle splays. Entering off the back wall are three shrines. The piers are octagonal, $2\frac{1}{2}$ diameters in height with a span between each pier of $1\frac{1}{2}$ diameters. The two piers on the extreme right of the inner row are only partly dressed. None of them have either base, capital or the side roll-bracket often found on such works. The breadth of the portico is 47 ft. 6 ins.; and the depth, or distance from the front line of the front row of piers to the back wall, is 20 feet; the height is 9 ft. 6 ins. The roof beams are plain, but it was evidently intended they should be carved, for the beginnings of a line of sculptured animals are visible on the face of the front beam. This piece shows a bull and two elephants, the hinder of which has its trunk entwined with the tail of the front one.

Cave No. 2.—This excavation stands facing the east, on the east face of the west hill, and about 200 yards north of cave No. 1. It is of much later date than that, approximately, the beginning of the VII century A. D. It shows more appearance of sculpture; and, though the piers in the portico have been hewn away, the outlines of the square bases can still be seen on the floor, and show them to have been of somewhat slender proportions and comparatively widely spaced. In the centre of the back wall is a shrine $7\frac{1}{2}$ ft. square by $7\frac{1}{2}$ ft. high.

Buried Monolithic Temple.—This example stands at the foot of the east side of the west hill, a few yards distant from cave No. 2. When first seen, the earth surface was level with its cornice. Mr. Rea cleared the front of earth, and, to enable the plan to be completed, partly removed the soil from the interior. It is a detached boulder of rock, out of which the temple has been cut. On the east front—on each side of the façade—a projecting piece of rock has been left. These are at right angles to the front, and are similar to what we find on cave No. 2. On the right wall, so formed, is a sculptured image of Subramanya, and on the left is Ganesa. The façade—between the two projections—faces the east, and has a central

door with two-figure sculptured panels on each side. Over is a cornice, with medallion blocks at intervals, all only partially worked out. On the sides and back are lines of plain pilasters, without carving of any sort. Along the top of each side of the exterior is a blocked-out moulded cornice. On the roof are the remains of a solid stone tower. The front door enters into a porch 15 ft. 6 ins. long by 7 ft. broad; on the back of this, and directly under the position of the exterior tower, is the shrine, 5 ft. 9 ins. square. The porch is 6 ft. 9 ins. high, and the shrine 6 ft.

In digging for the foundations of a house, at a short distance behind the monolith, was found a basrelief figure 2½ ft. high, very delicately cut on a slab of white slate.

STRUCTURAL TEMPLES.—Beside the Structural Chaitya discovered near Bezvāda (described on p. 79 of JOURNAL), which he assigns to the second or third century A. D., Mr. Rea reports:

Mallikārjuna or Īvara Temple.—This large and extensive building stands in the main street of the town, and is enclosed in a rectangular court 156 by 106 ft. The most ancient portion is the shrine, which may be fixed about the VII century, the remaining portions belong to the XI century A. D. Its walls are 7 ft. thick, and it is surmounted by a stone tower or *vimāna*. In front of the shrine is a small chamber or enclosed *mandapa*. The greater portion of the shrine tower, or up to the circular *śikhara*, is of stone; while the *śikhara* or summit is of brick, having been evidently restored at a date long subsequent to the foundation. In front of the shrine entrance is the basement of a building which has been intended for an open pillared *mahā-mandapa*. On it are a few sculptured panelled stones, which, if in position, would form part of an enclosing parapet or basement for the *mahāmandapa*. On each of the exterior walls of the shrine is a single sculptured panel. Each has groups of figures, boldly carved and spirited in design.

Nagaresvara Temple.—This building stands on a south spur of the *Arjunakonda hill*: on the face of the cliff, a rock-cut stairway leads to the temple. Near the top is a small rock-cut porch and cell. The temple consists of a walled-in square portico, now roofless, with four piers inside. The shrine enters through a small chamber on its west side. The walls of the shrine are massive, and carried up in stone to the under side of the domical *śikhara* of the *vimāna* tower. The exterior elevation of the tower is divided into four stories, by rows of cornices and string mouldings. The several tiers have the usual arrangement of small projecting pinnacles with pilasters. The domical *śikhara*, round-pointed, is of brick. The temple is ancient and seems contemporaneous with the buried temple in the railway grounds, and the shrine of the Mallikārjuna temple.

MOGALRAZAPURAM (near Bezvāda).—**ROCK-CUT REMAINS.**—Five caves are surveyed. All the rock excavations at Bezvāda and Mogalrazapuram

are distinctly Brahmanical. The only trace of Buddhism is the carved representation of a *dagoba* found in cave No. 5 at the latter place.

Cave No. 4.—South by east from the village is a somewhat large cave, which is the finest at the place. It stands back from the front of the rock; and the ingoing walls, so formed, have been intended for side shrines. On the left side is one, partly formed, with two piers blocked out, and a figure of Ganésa inside. The proportions of the piers are more slender than in other examples. The two in front are 1 ft. 9 ins. square, 4 squares in height, and 3 squares in span. In place of the responding pilaster, on each side is a projecting wall with sculptured *dvarapala*. The porch is large, and measures 15 ft. deep by 31 ft. 5 ins. broad. It is divided longitudinally by a row of 4 piers, the right central one of which has been broken away. On the back are three shrines, divided each from the other by a thin wall. The cornice over the front is bold and deep, with 3 pedimental blocks sculptured on its face. On one, standing on the cornice top are figures of lions and elephants: the summit of the centre is crowned by a fine, though weatherworn, many-armed Durga treading on the recumbent Mahishásura.

UNDAVALLE.—This village stands among hills about two miles southwest of Bezváda on the opposite bank of the Kistna, and in the Guntúr taluk. In addition to the large storeyed cave, there are several smaller rock-cut caves and sculptures. In the village are some sculptures and inscriptions.

JILLIGERIGUDEM (near Guntupalle).—*Buddhist rock-cut remains.*—These comprise a small circular cave, with a *dagoba*, now used as a Hindu temple; an extensive *vihara* in good preservation; a large hollow or cavity of equal frontage, in the rock on the left of it, which has been a *vihara*, though the walls are now hewn away; another wide cutting in the rock, south of the cave-temple, which also has been a *vihara*, but has its walls hewn off (it is similar to the other near the principal *vihara*); and two groups of small *vihara* caves up the hill behind the *stúpas*. These latter have not hitherto been noticed; and it is just possible that, but for the inaccessibility of the jungle brushwood which abounds, others might be discovered.

KAMAVARAPUKOTA (4 miles E. of Jilligerigudem).—*Rock-cut remains.*—These are on the hill south of the village. At the north base are two rock-cut basreliefs of Vali and Sugriva, each about 8 ft. high. A flight of steps, partly built and partly rock-cut, leads up to a natural cave, which has been partially hewn out, to convert it into a temple. The doorway is formed of masonry built in the entrance. A hole in the roof has been lintelled over with stone beams. Inside are two finely carved *dvarapalas* on detached stones. On the left side of the chamber, which enters directly from the outside, a passage leads in under the hill for some indefinite depth, but the roof shelves down, leaving a mere hole, so it is impossible to follow it. It is said to be an underground passage coming out on the other side of the

hill. I discovered a new rock-cut inscription here. It is in five lines of well-preserved old Telugu characters. Over this cave is another natural hollow in the rock; and the roof lintels of the under one form a portion of its floor. On the summit of the rock, over, is a structural tower or temple, the stone roof of which has almost completely fallen. At one time, it is said, it was used as a place of refuge, and guns were mounted on the roof.

A short distance to the left of the cave a rock-cut flight of steps leads up to a platform and hollow in the rock, on which is a small ancient structural temple. Inside is a well carved image of Lakshmi set on a pedestal. On the side of the stairway is a large rock-cut basrelief of Garuda with his right hand raised to strike, so says the tradition, whoever might attempt to take the treasure which was supposed to have been buried below the image.

PEDDA VEGI.—MOUNDS.—Eleven mounds are surveyed.

Mound No. 5.—On the north side of the village, midway between it and the mango tope, is a circular mound about 40 ft. in diameter, with a trench 6 ft. deep, formed by digging for stones. These are said to have formed a circular built wall, about 18 ins. high; but there were many loose stones in the earth above it, showing that at one time it had been higher. All these had been removed for the canal. On the southwest side of the circular trench was a white marble slab about 5 by 3 ft., with a "tiger" sculptured on it; it also was removed. Some bricks and stones lie around.

This mound seems important, and should certainly be excavated. The ring of stones might have been the base of a stone-faced *stūpa*, such as those at Jilligerigudem, or the great tope at Sanchi; and the rail of white marble, which would surround it, may still remain underground outside the circular trench. The excavators had simply carried round their trench so as to enable them to remove the circular ring of built masonry, and had not attacked the bank of earth which surrounds it. The white marble slab would form a portion of the rail, and they had unfortunately come on it by carrying their trench just a little too far into the outer bank at this point. The centre of this mound had not been dug, and if, as appears, this is a *stūpa*, the relic casket may still be there. VEGI is not Government property but belongs to a Zemindar of that ilk who resides at Sanivarapett.

TEMPLES.—Three temples are surveyed. *No. 1.* Northwest of the village is a small ancient Vishnu temple. Its details are characteristic; and, though the shrine is deserted, it is in good preservation. The tower is stepped in horizontal moulded courses, as are the Jaina temples at Vijayanagar; it is of red stone throughout, as have been all the structural remains at this place and Dendaluru. The moulded base-course is at present silted up with soil. The door faces the east; and inside is a stone image. The temple is in good condition and free of whitewash or plaster. It cannot be later in date than the XIII or XIV centuries. *No. 2.* In the northeast

corner of the village is a small ancient temple, now completely covered with thick plaster. It is dedicated to Parameśvarasvāmi. The door faces the west, has a *dvārapāla* on each side, and scroll ornament on the jambs and lintel. In the enclosing courtyard are seven ancient sculptures.

SANTARĀVUR.—There are four ancient temples and a detached *mandapa*, grouped together at the northwest end of the village; several sculptured stones; and fifteen inscriptions.

Various sculptured stones lie on the ground near these temples. One detached carving shows a warrior on the front, while his wives are sculptured on the sides. Close to it is another stone with a figure, much weather-worn. Another sculpture, 3 ft. 8 ins. long, has a row of deities and their attendants making homage to a seated god (probably Siva), a broken portion of which remains on the right. Another shows, on its front, five jewelled warriors armed with swords; while the top is sculptured with four-feet impressions encircled by a *naga*, with a raised flower-ornament on either side. [*Indian items are furnished by Robert Sewell, Esq., of the Madras Civil Service.*]

PALESTINE.

JERUSALEM.—*Discovery of the Pool of Bethesda.*—Herr Schick reports, in the *P. E. F.* for July (pp. 118–24, with 3 plans) the discovery of a large tank or pool under a small church, about 100 feet northwest of the Romanesque church of St. Anna. From the court west of the church of St. Anna, a newly opened passage 24 feet in length leads into a court about 50 ft. square, on the east side of which is a large arched room of Crusader masonry: from the north wall of this room (which is 6½ ft. thick) opens a wide doorway and short passage leading down to a row of five chambers of equal size (9 ft. wide by 14 ft. long). The barrel-arches of these chambers or porches were 13 ft. in height in the centre; each porch had an arched window in the northern wall: on the top of these porches or vaults once stood a small church, the apse of which (20 ft. wide, inside) is to a great extent preserved: a narrow door on the northern side of the apse leads to a small chamber in which is the mouth of a cistern or tank. Descending by steps leading to the flooring of the porches, thence, by means of a ladder, one reaches the head of a flight of steps which leads, 19 ft. down, to the bottom of the tank, which still contains some water: three sides of the tank are cut in the rock to a depth of 30 ft.; the northern side is a wall: the present length, east and west, is 55 ft., the width (north and south) is 12½ ft.; but apparently it extended toward the north, as the northern wall is a subsequent construction, the only original work in it being the round bases of five piers (3 ft. 2 ins. in diam.) hewn out of the rock: on four of these bases once stood round pillars, and on one a square pier. A flight

of 24 steps leads down into the east side of the pool from the courtyard of a Moslem house. Herr Schick says: "From the examination of the details on the ground now described, I am under the impression that the cistern is the Pool of Bethesda; at least, it was the place which in the Middle Ages was considered to be the Bethesda."

Discovery of a second Pool.—A few weeks after, further excavations revealed, to the west of the above, another cistern or pool (pp. 122-4, with plan) lying end to end of the first one. It is tunnel-shaped, about 16½ ft. wide and 64 ft. long: in the middle of it is a special arch or girder built of hewn stones, on which rests the wall of small stones. The pool has three mouths, one in the centre, the two others near the end walls. Sir C. W. Wilson and Capt. C. R. Conder add notes on the foregoing (pp. 124-34).

These twin-pools are undoubtedly those referred to by all writers from the IV to the XII centuries inclusive, as the *Piscina Probatica*, near the church of St. Anna.

Ancient Conduit, near the church of St. Anna.—The monks of this church, while digging for the foundation of a new building, uncovered a conduit 80 ft. north of and parallel to the northern wall of the Birket Israil. It is 2½ ft. wide and of an average depth of 7½ ft. The sides are constructed of hewn stones, covered, in some places with thick flagg-stones, in other places with an angular arch formed by two flat stones slanted so as to meet. The conduit extends eastward 150 ft.: westward its extent could not be ascertained: the bottom at the eastern part is 2389 ft. above the Mediterranean. Sir C. Warren, in his *Recovery of Jerusalem* (p. 178) describes a similar passage found by him outside the city-wall at the level of 2390 ft. It is evident that the one now found is a continuation of it. Over this conduit, were found several stone waterspouts, showing that other and later drains led into the main one.—C. SCHICK in *Pal. Explor. Fund.*, July, 1888.

PHOENICIA.

AKKO=PTOLEMAIS=ST. JEAN-D'ACRE.—*Mediæval Inscription.*—An inscription of the time of the Crusades, giving the names of Hugues Revel, grandmaster of the Hospitallers, and Josseume Destormel, commander of the same order, has recently been discovered here, and purchased for the Louvre Museum: it related, probably, to some religious or civil foundations.—*Paris Temps*, Aug. 25.

SYRIA.

SINDJIRLI.—*Excavations of Hittite antiquities by the Germans.*—The attention of American antiquarians was recently called to this mound, and it was hoped that American enterprise would undertake its exploration. The past

winter a party of Germans, under the patronage of their Government, have commenced the work of excavation, and 100 laborers in a few weeks' time laid bare a large number of blocks forming, as had been supposed, the basement of a Hittite palace. They were nearly all *in situ*, resting upon rude foundations of masonry. A line of blocks extends along the entire front, then opens midway into an entrance hall, which soon widens into a court about forty feet square. A narrow hall connects this court with another large court further within, which has been uncovered several rods square. These halls and courts are lined by a single row of basalt blocks, each standing on end, and nearly every block contains on its inner surface a Hittite sculpture. At one place is a hunting scene continued along a dozen blocks. The men are armed with daggers, spears, and the bow and arrow. Deer, rabbits, and birds represent a variety of game. At the entrance to the main-court, on either side, are the basrelief sculptures of an immense lion looking toward the outer door, and behind each lion stands a heavily-armed soldier. The superstructure, resting upon these Hittite blocks, must have been made of sun-dried brick, and perhaps, in part, of wood. The stones bear evidence that the buildings above them were burned. The pile of earth that forms the mound must be the débris of mud roofs and walls from the Hittite palaces to the peasant hovels of modern times.

No Hittite hieroglyphics have yet been discovered, but the most remarkable "find" is the colossal statue of Aššurdân king of Nineveh (early-seventh century, B. C.) standing on a pedestal in the smaller court of the palace. The workmanship is very fine. It had been thrown down and broken, but the fragments are all there and the whole figure can easily be restored. On this statue were several square yards of Assyrian inscription in cuneiform writing, from which the name was determined. Several shafts have been sunk in different parts of the mound, but thus far no other important results have been reached.

The Germans have also discovered in a Turkish cemetery near Sindjirli a statue with nearly a square yard of inscription in what seems to be Phœnician characters.

The *Kunstchronik* reports: "Karl Humann's latest excavations in North Syria have been most successful. They were undertaken under the patronage of the Oriental Society (of Berlin) in company with Dr. Von Luschan and the archaeologist Franz Winter. . . . The excavations brought to light a fine propylæa with forty Hittite reliefs, partly *in situ*." At the entrance was the colossal stele of King Aššurdân (682-667) of Assyria, father of Aššurbanipal, covered with cuneiform inscriptions relating to the war of the King against Egypt.

The finds were brought with great difficulty to the port of Alexandretta. It is hoped that some will go to Berlin, while the rest will be placed in the

Museum at Constantinople.—*Berl. phil. Woch.*, 1888, No. 39; ERHARD BISSINGER, U. S. Consul, Beirût, Sept. 22, 1888, in *Am. Architect*, Dec. 15.

ASIA MINOR.

INSCRIPTIONS FROM NORTHERN ASIA MINOR.—Professor G. Hirschfeld communicated to the Berlin Academy of Sciences (meeting of July 5) a paper entitled *Inscripfen aus dem norden Kleinasiens besonders aus Bithynien und Paphlagonien*. The inscriptions published were, for the greater part (1-57), collected by W. von Dienst, during a journey which he made from Pergamon into North Phrygia and Bithynia, in the summer of 1886, while Nos. 58-73 were added from Prof. Hirschfeld's own notes.—*Sitzungsberichte*, xxxv, 1888, July 19, pp. 863-92.

DR. STERRETT'S VOLUMES ON ASIA MINOR.—During the last few months, the Direction of the American School at Athens has published in two thick volumes, as volumes II and III of its Papers, the results of Dr. J. R. S. Sterrett's tours in Asia Minor during the summers of 1884 and 1885. Volume II is entitled *Epigraphical Journey in Asia Minor* (1884), and volume III, *The Wolfe Expedition to Asia Minor* (1885). The plan is to follow the route taken by the traveller and to publish the inscriptions found at each place in topographical order, with the addition of some short notes on the particulars of the trip. Uncial text and transcription of the inscriptions are given, and the short comment is usually supplemented by numerous references to authorities. Vol. II contains 397 inscriptions; vol. III contains 651. Most of them are inedited; some were already known, and the previous publications are here supplemented or corrected. The greater part belong to the period of Roman dominion. Many important topographical discoveries were made, consigned in the splendid maps by Kiepert which accompany the volumes. The work done by Dr. Sterrett for Asia Minor is of extreme importance. It can only be referred to here, awaiting a detailed review of the two volumes in a future number. They have already been favorably noticed in German, French, English and Italian periodicals.

PROFESSOR RAMSAY'S LAST TOUR.—During the past summer, Professor Wm. M. Ramsay made his customary trip to Asia Minor, confining himself, however, to two short excursions in Phrygia. He publishes some notes regarding it in the *Revue Archéologique*, 1888, II, pp. 218-26. They were mainly to throw light on some obscure topographical points. He says: "It is not probable that I shall again return to Phrygia, unless I am enabled to work there under better conditions. Next year I propose to go further east. My journeys have had especially for their object to settle the ancient topography of the country, and I think that my articles on this

subject (*Journal of Hellenic Studies*, 1883 and 1887; *American Journal of Archaeology*, 1887 and 1888) have established on a solid basis the general features of the comparative geography of Phrygia, Western Pisidia, and Pamphylia."

GERMAN EXPEDITION.—A communication from Smyrna in the Berlin *Das Echo* states that Dr. Humann and Prof. von Kaufmann have started for the interior of Asia Minor upon a new exploring tour. The excavations which they have carried on at the ancient Tralleis since September are said to have been crowned with brilliant success.—*Athenæum*, Nov. 10.

ISMIDT=NIKOMEDEIA.—*Necropolis*.—From the ruins of a Græco-Roman necropolis on this site some inscribed sarcophagi of the time of the Antonines, and some sculptures, have been exhumed. The former were stolen, and the latter used in the construction of a depot.—*Levant Herald*, August 10.

KAISAREIA (Kappadokia).—A Catholic missionary has discovered here a Latin inscription engraved on a column by the side of which lay a carved hand. The inscription relates that a bust of the Sun or Mithras was placed upon this column by Callimorphus, intendant of domains, for the *salus* of Cresinus. Its date is thought to be the reigns of Septimius Severus and Caracalla, and M. de Villefosse, in communicating the inscription to the *Académie des Inscriptions* (Sept. 7), stated this to be the first document of the kind found up to the present at Kaisareia of Kappadokia.—*Paris Temps*, Sept. 8; *Revue Critique*, 1888, p. 219.

TRALLEIS.—*New investigations*.—One of the conservators of the Museum of Constantinople, Nikolaki Effendi, has been sent to Aïdin to excavate in the neighboring woods for the ruins of the ancient Tralleis. Antique fragments have been often used by the inhabitants of Aïdin as building material.—*Cour. de l'Art*, 1888, p. 368.

KYPROS.

NEW JOURNAL.—We have received the first number of the *Owl*, a weekly newspaper and review published at Nikosia, Kypros. A special feature is to be an archæological *feuilleton*, under the editorship of Dr. Max Ohnefalsch-Richter, who has already received the promise of influential support. Among the subjects to be treated, with the help of illustrations, are the light thrown by early Kypros antiquities on the Bible, on Homer, on Dr. Schliemann's discoveries at Hissarlik and Mykenai, and on the Hittite characters. The first paper, which is excellently illustrated by a colored plate, is by Dr. Ferdinand Dümmler, of Giessen, upon the alabastron signed with the name of Pasiades—an Athenian painter of the sixth century—which was found near Poli-tis-Chrysokhou.—*Academy*, Sept. 29.

CYPRUS EXPLORATION FUND.—The work of the Cyprus Exploration Fund, carried on by members of the British School at Athens during the

past winter and spring, has been more than once referred to (vol. iv, pp. 87-9, 198-200, 348-9). The following is based upon the reports of Mr. Ernest Gardner, the director, and of Mr. R. Elsey Smith, the architect of the expedition. A preliminary tour of exploration was made in December by Mr. Gardner and Dr. F. H. H. Guillemard, who visited the ancient sites of Kerynia, Lapethos, Soloi, an early Phœnician temple on the Limniti river, Poli-tis-Chrysokhou (probably Arsinoë), and new and old Paphos. On a later occasion Mr. Gardner also visited Amathous and Kourion.

NIKOSIA (Leontari).—Various circumstances delayed active operations until February (1888), when Mr. M. R. James conducted the excavation of a hill called Leontari, near Nikosia, containing traces of early houses and walls, deep cuttings in the rock, a massive fort, and archaic tombs. No decisive evidence was forthcoming as to the date of the massive walls of the fortress, which are attributed by some competent authorities to Roman times, but are more probably mediæval. The top of the hill, however, was occupied on the north by a network of primitive walls, mixed with early pottery and other objects pointing to a remote period, and by an early wall of fortification, replaced in later times by the massive one still extant. On the south of the hill lay tombs of an equally archaic period, which yielded about 200 vases and other objects in bronze, lead, and silver. The rock of Leontari is a remarkable elevated tableland of sandstone formation rising 130 feet above the surrounding plain, and 520 feet above the sea-level; it has a steep cliff at the top running all round the hill, which renders access difficult. The hill, having a circumference of nearly a mile, offers too long a line of defense for the men who could find refuge on it; advantage was therefore taken of a narrow neck of land, which divides the hill into two unequal portions, to form an inner citadel of the smaller northern half. It is here that all the traces of building were found; the tombs all lie beyond the wall on the southern half of the hill. This arrangement recalls the general plan of the fortress of Tiryns, but at Leontari the inner citadel itself has a circumference of almost the same length as the whole fortress of Tiryns. Relying for the most part on the natural slopes of the hill for defense, the inhabitants only raised a wall across the isthmus at one exposed point. This wall, like all those on the northern hill, was built of small, unhewn stones, laid without mortar and carefully fitted. Nowhere, however, is there more than a single course flush with the ground. The wall was six feet broad, and had a large tower 60 feet square at its west end, and possibly another at the east. A few feet south of this wall are extensive remains of a far more massive structure, consisting, likewise, of two great towers and a curtain-wall. The west tower, which is the most perfect, consists of a single chamber 32 ft. by 57 ft., with walls 16 ft. thick. The curtain-wall is 10 ft. thick. The inner lining of the towers consists of good

ashlar work, while the outer facing of the walls, above a plain base, consists of very fine rusticated work—i. e., blocks having a raised centre-panel with a broad chisel-draught all round. The core is entirely of stone, set in a hard white mortar, and laid in courses about two ft. high, containing here and there stones of the full height of the course, but mostly built of smaller stones. To sum up, we seem to have in Leontari Vouno traces of a very early settlement, as evidenced by the tombs, to which we may refer the slighter early walls, while the more massive walls belong to a later occupation, probably in mediæval times.

OLD PAPHOS.—The principal work of the season was the excavation of the great Temple of Aphrodite at Old Paphos. As one of the two or three great centres of worship in the ancient world, this site seemed almost certain to yield important results. It had never been excavated, although such an authority as the Central Archæological Institute at Berlin had long held its excavation to be most desirable. Digging was begun February 3, and carried on without intermission until May 5. The actual site of the temple having been ascertained by the cutting of deep trenches in various directions, the whole of the accumulated earth was gradually removed, so that not only was the plan left clearly visible, but the inscriptions and other antiquities scattered about could not fail to be discovered. First, as to the temple itself. It is known to have been of great antiquity and of Phœnician origin, and it was apparently but little altered by the Greeks when they became the ruling power in the island, for nowhere on the site were found traces of any building at all resembling the usual Greek temple. In Roman times it was twice damaged by earthquake—in the early part of the first century and towards the close of the second. Each time it was restored with great magnificence, but although the Romans made important alterations and additions they do not seem to have wished to change the main character of the building, or even to any great extent the arrangement of the various parts. Coins exist of Roman times giving a view of this temple, and showing a tall central chamber or cella, with lower chambers or porticoes on either side, and a court in front enclosed by a wall with gates. A coin of Byblos, a town on the Phœnician coast, shows a temple of very similar structure, with a large court surrounded by a wall containing the sacred cone, and entered on one side through a lofty portico. In the main there is a strong correspondence between the temple at Paphos and the account of Solomon's temple given in the Second Book of Kings. In both we get a series of large outer courts; in both a lofty central chamber of small dimensions, flanked by lower ones. The accompanying diagram (*Figure 19*) shows the general plan of the buildings. Walls of a date earlier than Roman are indicated by dark bands, while the Roman work is shown by cross hatching. In each case the dark shad-

ing indicates such walls or fragments as are actually laid bare or found *in situ*, the dotted lines those walls or portions of walls for which there seemed to be sufficient evidence to warrant them being shown on the plan. Every part of the site which could be examined at all has been explored down to the rock-level. The temple stands on a considerable elevation above the sea. The plan falls into two main divisions—(1) the south wing, standing de-

tached; (2) a quadrilateral enclosure, containing various halls and chambers. (1) The south wing seems to have been the earliest portion of which any traces remain. It consists of a large hall or court, bounded on the west by a fine wall of massive blocks, standing on a basement of rough stones, with a carefully-prepared upper bed. Between this court and the great quadrangle are remains of some irregular chambers and some pier-bases; it seems probable that these bases may have been part of a triple avenue leading to the court, so that if this were the original shrine we should have an arrangement similar to that on the Byblos coin. (2) The rest of the site is occupied by buildings of later construction than the south wing, and probably added as the temple

gained in renown and wealth. Taking the various parts of these later buildings as they occur on the plan, and commencing from the south, we find stretching across the whole width of the site a great hall or stoa, with a row of columns down the centre. Though the construction is Roman, there is good ground for believing that the general character of earlier buildings is here as elsewhere retained; of such earlier and smaller chambers sufficient traces remain to allow of fairly accurate restoration. The stoa

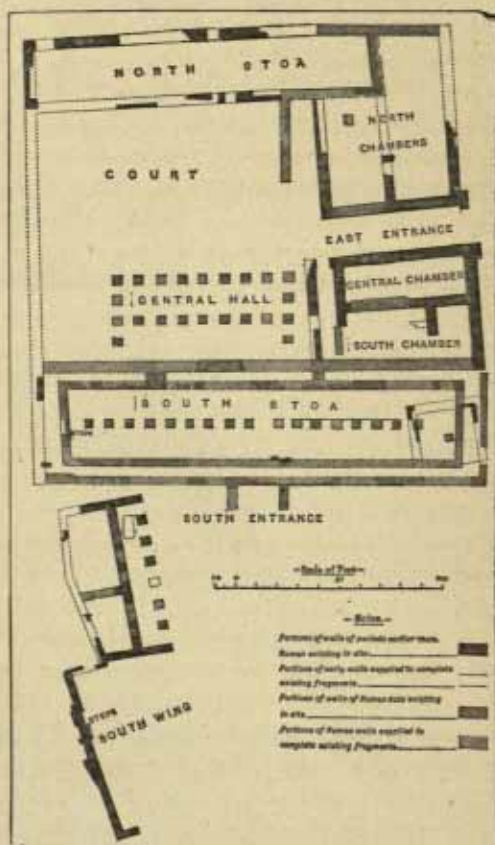


FIG. 19.—Temple of Aphrodite at Old Paphos.

was probably roofed, and entered from the south by a projecting portico. Running round the walls inside is a broad platform two feet above the general floor-level; from the low wall which supported this platform project a series of small corbels to carry a seat. The floor at the lower level consists of a geometrical mosaic, carefully laid in marble of delicate natural tints. This was probably the portion of the temple to which worshippers would be first admitted, and would thus answer to the outer court of Solomon's temple. Under this mosaic floor were found several inscriptions, the marble head of Eros, and various fragments of bronze and terracotta. North of the stoa comes the central hall, also of Roman construction, and so arranged that its south side is formed by part of the north wall of the stoa, from which no doubt it was entered direct. This hall was probably covered by a roof, and had a double line of columns, as in the great stoa on the Akropolis at Athens between the two theatres. But the walls as they stand are very imperfect. Both this hall and the stoa were of the Doric order, and some architectural fragments were recovered. The hall is of much smaller dimensions than the stoa, and seems on the north side to have opened into a great court without roof. Here, probably, and in the hall stood many of the dedicatory bronze statues of which the bases were found buried in a large pit. The whole of the space east of the hall and court was occupied by a series of chambers of considerably earlier date, with walls much more regularly built of carefully prepared stones of moderate size, generally laid without mortar. Owing to the curious angle at which the Romans set the south stoa to the earlier buildings, the southernmost chamber is of an irregular form. The central chamber is the most perfect. All the walls are of early date, though the south wall has been partly rebuilt in Roman times. Remains of a late stone floor are interesting as giving the probable floor-level. Under it, besides fragments of a Kypriote and other tablets, were found a very fine gilt-bronze pin and a crystal cylinder belonging to a sceptre. In default of direct evidence as to the position of doorways, the difference of floor-level shows that there can have been no access to this chamber on the north side. The main entrance was probably on the east. North of the central chamber is a broad passage or chamber, with no wall to east or west. This may have formed a great entrance for special occasions, and might thus be identified with the central feature represented on the Kypriote coins as giving a view from the open court. Two large bases for piers actually exist at the east end of the passage where piers occur on the coins. The west end was probably open. The chambers north and south correspond to the lower buildings on the coin with the courtyard extending in front of them. These chambers were probably connected with the administration of the temple, or formed residences for the priests. Finally, along the

north side of the open court, and overlapping part of the chambers, is the north stoa, of smaller dimensions than the south stoa, and with no columns in it. The floor is of mosaic, but much coarser than that in the south stoa. The walls are partly Roman, partly of earlier date. Outside this stoa, which apparently formed the north boundary of the temple-site, occur detached fragments of walls and small courts of Roman date, belonging, no doubt, to residences or offices for the priests or attendants of the temple.

Since the completion of active work, Mr. Hogarth, has been engaged in a careful archæological survey of the island, and his report will help to guide the committee in future operations. In the meantime, a site has been decided upon for next season's work, which is confidently expected to yield a rich harvest of antiquities.—*London Times*, Sept. 24.

EUROPE.

GREECE.

AKRAIPHIA (Boiotia).—Excavations have been renewed here in the name of the French School. A circular foundation, 6 met. in diameter and preserved to the height of 0.70 m., has been uncovered: it is thought to be the Tholos of Apollon mentioned by Plutarch. There was found, also, a bronze statuette of a youth, his hair bound around with a taenia; and an archaic marble head of Apollon of the usual type.—*Ἀρχ. Δελτίον*, Sept., 1888.

Stele with Nero's address to the Greeks.—M. Maurice reports, on Sept. 24, that in his archæological tour through Boiotia he discovered, in the walls of an old church in a village occupying the site of Akraiphia, the marble stele containing the original and complete text of the address pronounced by Nero to the Greeks at the Isthmian games on giving them back their liberty. It is brief and clear, in a strange emphatic and refined language, the first example we knew of Nero's style, being drawn up evidently by the Emperor himself. On the same stele is a decree in honor of Nero by the demos of Akraiphia.—*Acad. des Inscr.*, Oct. 5, in the *Revue Crit.*, 1888, p. 276; *Athenæum*, Dec. 8.

ABARITZA (Thessaly).—A peasant found, at Abaritza near Melitaia in Thessaly, an archaic stele, ending in a palmette, on which is represented in relief a serpent devouring a bird.—*Ἀρχ. Δελτίον*, June.

ATHENS.—**EXCAVATIONS ON THE AKROPOLIS.**—The excavations along the side of the Parthenon have produced relatively fewer objects of interest as they were pushed toward the west. During June and July, Dr. Kabbadias continued his excavations uninterruptedly. The greater part of the workmen were employed to the south of the Parthenon, about opposite the

middle of the temple. In the débris accumulated for the construction of Kimon's temple were found many fragments of poros sculptures and important pieces of the buildings destroyed by the Persians.

Further to the south, addorsed to the outer wall, came to light a large building of which several stones had already been visible. Its foundations consist of unfinished drums of columns which had apparently been rejected as useless, of small fragments of marble, and of earlier architectural members (e. g., triglyphs and geisa of the same poros building, pieces of which were also built into the foundations of the Perikleian Propylaia). The thinner walls above the pavement are built of regular poros blocks. As the inner flooring is several meters below the old level, the building can hardly have stood in later times, but is probably only a workshop which was pulled down after the completion of the Parthenon. In its interior were found a mediæval cistern and other remains of later constructions, proving that also in the Middle Ages a considerable building stood here. In accord with this was the finding, in the upper part of the stratum of débris within the ancient construction, of two reliefs which are later than the Persian wars and from the best Greek period (see p. 493).

The mediæval and modern walls on the western ascent are being torn down. The Odysseus-bastion is nearly destroyed and has yielded several inscriptions: the defensive wall between the theatre of Herod and the large Turkish gate is torn down. The Roman towers on either side of the Beulé gate will be freed from later additions: that to the north is still so well preserved that it will need but little restoration, that to the south has suffered far more. From the outside, it can easily be seen that both towers are built of the material of older Greek constructions. By the destruction of the mediæval walls no early topographical data of interest have as yet been ascertained.

A large ground-plan of the northern half of the Akropolis, which Herr Kawerau prepared after the close of the excavations, will soon be published by Dr. Kabbadias.—W. DÖRPFELD, *Mittheil. Athen.*, 1888, II, pp. 224–5.

From the excavations on the south side of the Parthenon, it was found that the poros-stone pavement did not extend the whole length of the foundation of the Parthenon, but only about half-way. On the other hand, the wall that was built of huge uncut blocks, and which served as a support for the filling between itself and the foundation, ran the whole length of the foundation up to its southwest corner: here it meets the wall of Pelasgic construction which formed, of old, the south side of the Akropolis. At the junction of the walls was a stairway by which one could ascend, from the space between the southern wall of the Akropolis and the supporting wall of the Parthenon, to the space between the supporting wall and the Parthenon itself. This stairway proves Kabbadias' theory, that this inner

space was filled in before the outer space. The excavations under the Museum resulted in discovering a part of the Pelasgic wall near the northern rooms of the Museum. In this same location, were uncovered three tombs similar to those found on the east of the Museum. Near the head of one of the skeletons was found a vessel of the so-called Mykenai ware.

—*Ἀρχ. Δελτίον*, September.

Sculptures.—The *Δελτίον* for June reports the discovery of further fragments of the combat of Herakles and Triton. Among the recently-found fragments are a number which complete former pieces in an interesting manner. Such are fragments of the Athena from the Fight with the Giants, e. g., the right foot and lower leg in rapid motion. The folds of drapery are indicated in a very rudimentary way by incised lines placed wide apart. By means of this peculiarity, a number of other fragments have been identified. Between the museum and the south wall, some fragments of the statue of the Kriophoros. In throwing down the walls at the w., a few sculptures were found: for example, a fragment of a relief with three dancing female figures and traces of a third, which belongs to an already known work (*Berl. Gipsabg.*, 1841, 1842) that contains at least eleven dancers. The epigraphic remains are of greater importance.—*Mittheilungen, Athen. Abth.*, 1888, II, pp. 225–8.

Two reliefs, both of which are illustrated in the *Ἀρχ. Δελτίον* of July, have been found. The first (referred to on p. 354) is a beautiful basrelief representing Athena with helmet on her head, resting her right hand on her hip and with her left leaning on her spear: her posture is meditative. The second relief is over a psephisma of the Athenians which confers τοὺς ἐν Σάμῳ, ὅσοι μετὰ τοῦ δήμου τῶν Ἀθηναίων ἐγένοντο the right of citizenship. The date is 405–4. The relief shows Athena helmeted advancing and offering her hand to a female figure who is either a personification of Samos or Hera the protecting divinity of that island. Pieces of this inscription already discovered and published in the Attic Corpus are now found to fit the fractured lower part of this stele.—*Mittheil. Athen.*, 1888, II, p. 225; *Berl. phil. Woch.*, 1888, No. 43; *Ἀρχ. Δελτίον*, July.

Further results of the excavations are, (1) a bearded head of poros stone of about natural size; (2) bits of poros stone which with others previously found make up a colossal head of a bull with well-preserved traces of painting on every part of its surface. Among the bronzes are (a) a statuette of a nude youth in the attitude of a dancer, (b) a head of Medusa of excellent workmanship, 0.10 m. in circumference, (c) the handle of a vessel representing lions tearing prey. Fragments of pottery, some of them inscribed, were also found: among them is a plaque of black-figured ware representing a vintage scene; a fragment of a red-figured vase shows the upper part of an Apollon.—*Ἀρχ. Δελτίον*, August.

A second excavation was carried on in the narrow passage situated between the museum and the outer wall which resulted in finding a Nike-torso of natural size, of the type of the Nike of Delos, and of the marble head that fits on to Dr. Furtwängler's youthful torso (see p. 354). The third excavation was made directly under the museum itself.—*Ἀρχ. Δελτίον*, June.

E. A. G[ardner] writes from Athens to the *Athenæum* of Jan. 12: "The excavations within the walls of the Akropolis are now all but completed; they have reserved their most precious treasure for the last—the head of Iris from the Parthenon frieze, joining on to the block with Zeus and Hera now in the British Museum. We understand that Dr. Waldstein intends to publish this fragment, and will not anticipate his publication by any description; here let it suffice to say that in preservation it is all but perfect, like those of the magnificent slab with three deities in Athens, and that its beauty is, if possible, even greater. To the artist, beside this discovery all others will pale; but there are many others that are of considerable interest. In particular may be mentioned the halves of two great pediments of poros stone, one representing the struggle between Herakles and Triton (on a larger scale than that previously discovered with the same subject), and the other containing a most strange monster, or monsters (as put together by Dr. Brückner), three blue-bearded men close together; each ends in a snaky tail, and these three snake-tails, coiled together, fill the corner of the pediment; the outside figure on each side also had one wing. To this belong the two heads that excited some attention last spring."

Vases.—The *Δελτίον* for June reports the discovery of very important fragments of vases: (1) Athena standing armed before an altar; inscription ΑΘΕΝΑΙΑΞ; two women and one man advance: (2) fragment of a pinax with the letters ΤΙΜΑΡΧΟΞ Μ...: (3) fragment of a kylix, found in the pre-Persian stratum, with the letters [ΝΙΚΟΣ]ΘΕΝΕΞ Μ ΕΡΟΙΕ- [σε] (this restoration, if correct, would, as M. Reinach reminds us, support M. Pottier in placing Nikosthenes in the VI cent. instead of in the latter half of the V according to Rayet's opinion): (4) fragment of black-figured vase with two armed figures forming part of a gigantomakia; one of them has the boustropheden inscription ΑΦΡΟΔΙΤ. | ΞΟΜΙ..., and is probably the earliest representation of the armed Aphrodite, ἔνοπλος: (5) fragment of a pinax with an armed Athena seated with two other figures.

Among lately discovered inscribed vases is one in the possession of Miss Tricoupi of Athens, with the name of Athenodotos repeated; another, purchased by Mr. van Branteghem, with the name ΛΕΑΛΡΟΣ.

Inscriptions.—The June *Δελτίον* reports the finding in the walls that surround the Beulé gate a new fragment of the treaty concluded in 423 between Athens and Perdikkas, King of Macedon (*C. I. A.*, I, 42, 43). Another fragment completes the metrical inscription published in *C. I. A.*, I, 482.

Most interesting is a fragmentary slab of Pentelic marble bearing a list of tributary cities among which is the Karian city of Amos, which formed part of the Knidian Chersonnesos: the other cities are Astypalaia, Nisyros, Anaphe, Myndos, Klasomenai, Erythrai, etc.: its date is between 425 and 413. A small marble slab completes *C. I. A.*, i, 37, where are enumerated the new tributes established in 425: it makes known a list of Thracian cities that had never been known to belong to the Athenian Empire. Dr. Lolling is at work classifying and cataloguing the Epigraphical Museum. He has found a new fragment of the earliest known Athenian decree, the regulation of the *klerouchia* sent to Salamis (Foucart in *Bull. Corr. Hellén.*, xii, p. 1), and has proposed a new restitution: he has found, also, a new fragment of the accounts for the construction of the Erechtheion.

In the rampart near the *Klepsydra* was found an inscription giving a list of magistrates of the time of Augustus. Three inscriptions believed to be lost were recovered here. In clearing some ground west of the Parthenon, there was found a votive inscription to Athena Erganê, which goes far to prove that her sanctuary was situated here.

Near the southwest angle of the Parthenon were found eight inscriptions. Two of them are written in the boustrophedon manner; another relates to the emancipation of slaves; while a fourth adds two new fragments to an inscription already published relating to an Athenian alliance of 375/4 B. C.—*Ἀρχ. Δελτίον*, July, Aug., Sept.

CENTRAL MUSEUM.—*Additions*.—I. Two important archaic works confiscated by the Ephory; (1) at Corinth, a basrelief of natural size, representing a bearded figure crowned with laurel, raising with his left hand a fold of his tunic and holding in his right a marble globe on which are engraved a bull and a crab; (2) at Abaritza, an archaic stele (p. 491). II. Several pieces of sculpture of the Roman period discovered near the temple of Zeus Olympios; the best is the statue of an ephebos, of archaistic style. III. Statuette of Hermes from Samos.—*Revue des études grecques*, 1888, pp. 350–1.

IV. We find in the *Ἀρχ. Δελτίον* for June (*Revue Arch.*, 1888, ii, p. 216) the following additions. (1) Male portrait of natural size, crowned with laurel, found by the French school at Amorgos. (2) Bust of Antinoüs, larger than life-size, found at Patras. (3) Small head in relief of Apollon (?), found under Dr. Schliemann's house at Athens. (4) Female portrait, life-size, found near the Olympieion. (5) Bronze mirror-handle with archaic "Apollon"-figure, found in Thessaly. (6) Objects discovered at Tanagra, among others, a black skyphos under whose handle is the archaic inscription *Λευκέρους ἐμί*; several ordinary painted vases; a large geometric bombylios; a black-figured skyphos decorated with a Kentauiromachia; a large kantharos with the twice-repeated archaic inscription *Μαφύραία ἐμί*; an aryballos

on which is represented Dionysos seated, holding a kantharos, in front of Athena, also seated, with aegis and helmet.

v. The following additions are given in the August *Δελτίον*. (1) Large sepulchral stele ending in an anthemion, of a late period, with the figure of a nude youth in relief; found at Thespiæ in 1884: four other sepulchral reliefs from Thespiæ. (2) Objects found in the excavation of prehistoric graves in Old Epidauros under the direction of the Ephor B. Staes: fifteen vases of the Mykenai type, with double or single handles, and decorated on the body with taenias; fragments of many other vases of the same style; a bronze spear-head. (3) Bronze mirror with its cover, on which is engraved the head of a woman, injured about the lips and hair. (4) Large number of antiquities from the late excavations at Tanagra: among these are over forty terracotta statuettes. vi. In the *Δελτίον* for July and Sept., under "Additions," are enumerated more objects, coming mainly from the excavations at Tanagra and Mykenai.

DEKELEIA.—Excavations on the road from Dekeleia to Acharnai, at a point where Leake placed the deme Oion Dekeleiakon, have uncovered a wall constructed of the local stone, and near it a pit. In this pit were found three sarcophagi, one of stone and two of Pentelic marble; and there was a space where a fourth sarcophagus seemed anciently to have rested. The sarcophagi appeared not to have been opened, but, besides a few earthenware vessels and a bronze mirror, nothing of interest was found. When a stone from the ruins of Dekeleia, whose face bears an inscription already published in the *Attic Corpus*, was carefully cleaned, a new inscription of 68 lines (in part a continuation of the first) was found upon the back. By this inscription, extended information is given on some of the questions regarding the relations of the family and the *phratría* which were hitherto so obscure. —*Αρχ. Δελτίον*, August.

DELOS.—*Scratched drawings*.—M. Salomon Reinach communicated to the *Acad. des Inscr.* (Aug. 24) a study on the antiquities discovered by him in 1882 at the theatre of Delos, and called attention to a unique collection of drawings with the point, made by the spectators in the theatre. They are drawn with amazing surety of hand. There are dogs, a he-goat, a head of Medusa, a nude running man, a bearded term, etc. There is nothing comparable to them for fidelity to nature except in the engravings on reindeer-bones from the caverns of Gaul.—*Paris Temps*, Aug. 25.

Resumption of Excavations.—M. Homolle has been dispatched to Greece in order to resume the excavations at Delos.—*Athenæum*, Oct. 20.

DELPHOI.—The excavations at Delphoi will begin as soon as the inhabitants have been transferred to another locality. The houses to be demolished will cost some 60,000 francs. The Greek Government has declined to proceed with the arrangements made with France for the excavations at

Delphoi, which the Greeks made dependent on the acceptance of the commercial treaty with Greece.—*Athenæum*, Dec. 22, 29.

ELEUSIS.—In the excavations at Eleusis have been found some wall-paintings of the Roman period, but much injured. On one part is seen Jupiter seated on a throne, holding in his left hand a sceptre and in his right a Victory. They will be reproduced in the next number of the *Athenian Archæological Journal*, in which will be figured and described two groups of statuary discovered on the same site.—*Athenæum*, Nov. 3.

EPIDAUROS.—*Prehistoric tombs*.—Excavations near Palaia Epidauros conducted by B. Staes have recently lead to the discovery of prehistoric tombs like some found at Mykenai and a few years ago at Nauplia. In all, seven tombs have been uncovered, four of which lie in line but are of different sizes: two being higher and not parallel. As all are similar in arrangement, a description of one of an average size will be sufficient. It lay entirely beneath the surface, and was found in running a trial trench. The entrance was cut out of the rock, and measures 1.20 met. across the widest part, its depth varying with the slope of the hill from 0.50 to 3 met.: the length of the entrance passage is 6 met.: it has a pyramidal shape, and was closed by good-sized blocks of stone lying upon each other to a distance of 2 m. before the doorway—a sufficient evidence that the tomb had not been rifled. The doorway itself had a somewhat pyramidal form, being 1.50 met. high and 0.50 wide below, but hardly 0.25 met. wide above. The tomb within was quite like a circular cave (in horizontal projection) with a diameter of about 4 met. Four skeletons were within, and the bones, especially those of the extremities, were well preserved. The skeletons were placed as if radiating from a centre, and all had their heads toward that side of the tomb which was opposite the doorway: near the head, on the right, there was in every case a small vase of the usual Mykenai ware. Near one of the bodies was a finely-preserved bronze spear-point. Parallel with this tomb and almost upon the same line were four smaller tombs, of less careful construction, but like it in other respects. The entrance and doorway of each of these were closed with stones. There was but one exception, and in this no bones were found, but the tomb was full of other matter. In the other tombs, as in the first tomb, were found bones and one vessel each, of similar form. Within the larger of these tombs, the depth of whose entrance before the doorway was five and more meters, and whose entrance and doorway were completely closed by huge stones, was found a quantity of pieces of large vessels, but not one perfect. The breakage of the vessels had evidently taken place within the tomb, since some of the fragments when put together formed a complete whole. The bones of some of the dead were found scattered in disorder and most of them mixed with bits of pottery near the doorway. Evidently, the tomb had been often used by later genera-

tions. In one of the smaller tombs were the bones of a single corpse: the skull rested between the shin-bones, showing that the dead had been placed in a sitting posture. The tomb seemed to belong to a woman, because nothing was found in it except a bronze fibula and two whorls.

The slope in which these tombs are, and in which presumably others are still concealed, was used as a cemetery in later ages, especially in Roman times. Excavations on the peninsula on which are the fortifications of ancient Epidaurus brought to light more tombs of the Roman period, and an archaic head of Apollon.—*Ἀρχ. Δελτίον*, August, pp. 155-58.

KORYTHIOS (Arkadia).—On the road from Tripolitza to Lerne, a peasant has discovered some bases of marble statues, a stele with the inscriptions ΑΡΤΕΜΙΣ one one side and ΚΛΕΙΝΙΑΣ ΑΝΕΘΗΚΕ on the other, the archaic torso of a female figure seated on a throne, and a beautiful bronze statuette of Artemis. These discoveries have been taken to Tripolitza.—*Ἀρχ. Δελτίον*, June.

MANTINEIA.—*New Excavations*.—The French School are continuing their excavations, which are not as fruitful as those of last year. The June *Δελτίον* reports the discovery of an archaic inscription, some sculptures of the Roman period, and the foundations of a temple. The July *Δελτίον* reports that, at the beginning of July, the excavations were suspended, and the objects found transferred, some to Tripolitza, others to Athens.

MYKENAI.—The following details concerning the excavations at Mykenai by the Greek Archaeological Society have been communicated to the Greek press by M. Tsountas (*cf.* pp. 360-1).

The excavations that have been again taken in hand this year, and have been proceeding now for six weeks, continue to reveal fresh tombs, so that the extent of the nekropolis cannot yet be defined. It appears, however, that all the land surrounding the ancient city was used for burial, except those places which were unsuitable for the purpose. The tombs are always found on the slope of the hill, and consist of one, sometimes two rock-cut chambers, entered by passages, either horizontal or inclining downward, which penetrate into the interior of the hill, terminating at the door of the tomb. In some instances, this passage measures over 20 met. in length, and 2 or 2½ met. in width. The chambers have an area of 35 to 40 square met., and are mostly square, and constructed with great care. The space that intervenes between the tombs proves that they were family vaults; and, in fact, more than one body is always found in each tomb. When the first occupant of the tomb had been buried, the doorway was closed by a wall sometimes two or more met. thick: the passage was then filled up with soil, so as to conceal the door and thus protect the dead from spoliation. When another member of the family died, the passage was cleared, and the wall which barred the doorway was pulled down. Most of the bodies are laid at full length, but some appear to be in a sitting posture.

The tombs in question are of earlier date than the Homeric age, and are to be placed as far back as 2000 B. C., at which period the cremation of the dead, if practised at all, was not a general custom, and the dead were deposited in the tomb without being covered with soil. The special importance of these tombs lies in the fact that their contents throw light on a period of which we have no records of a different nature, and, moreover, they have a more especial significance, inasmuch as they have yielded certain objects that had not been found in other tombs of the same date. Thus, we find that bronze mirrors, small knives which served as scissors, and razors were in use even in those early times. The most abundant articles are beads of various materials belonging to necklaces. They vary in shape, and are chiefly of glass, but some are of stone and larger than the others, being about the size of a franc, and have pictures of animals engraven on one side; these beads are, however, mostly of onyx or natural crystal. Twenty-four such stones have been found now, and also two rings of solid gold, with similar engravings. This year, many articles of ivory have been discovered: the most remarkable is the head of a man, like, but smaller than, the one found at Spata.—*Athenæum*, Sept. 29: *cf. Berl. phil. Woch.*, 1888, No. 40.

Late excavation of prehistoric tombs.—During the latest excavations thirteen tombs were examined, and the following objects found. (1) *Ivories*: Two male heads in profile to the right on pieces of ivory flat on the back with holes by which they could be nailed to a surface; another piece had a griffin incised. (2) *Glass*: Four small plaques of a vitreous material, one of them with the figure of a woman in relief. (3) Small ornaments of gold and glass. (4) A vessel of stone, bearing the finely-executed relief of a polypus. (5) Twenty-four cut stones or gems, eleven with figures of animals: one is of a peculiar cylindrical shape, and has a human figure; another represents two winged lions with forefeet raised and resting on an altar placed between them in a way to suggest the Lion Gate at Mykenai; others show a man grasping a horned animal, as in the scene on a wall in the palace at Tiryns; still another has some lions standing near trees. (6) Two solid gold rings: the smaller one of these has an animal engraved upon it; the larger one has two animals standing on each side of a tree: a third gold ring is made of a finely twisted *σρίμμα* (braid?), but has no bezel. (7) A silver bowl with one handle but without any lip (height 0.06 m., diameter 0.18 m.): on the outside of the belly is an inlaid gold decoration; around the lip is a band of men-faces, also formed of gold. Two of these faces or masks were found in position, four others were found detached, lying in the tomb. (8) Two terracotta figures of women: one is noticeable on account of the form of the head and for a necklace executed in color, the other holds a small child in its arms. (9) A bronze dagger; over fourteen metal arrow-heads and three spear-heads; also a bronze buckle. (10) A small cylinder of hematite

with a hole bored through it and several figures upon it, some of which seem to have horse-heads. (11) Nine bronze vessels, all from the same tomb: six of these have the form of a *krater*. The largest measures 0.48 m. across the opening, and has the upper surface of its lip ornamented with a triple band of small dots in relief: the entire bottom and part of the belly are missing. The other five *kraters* are without ornament; four of them are well preserved. Of the other three vessels, one, though badly preserved, has the shape of a shallow bowl (*phiale*) supported by three feet, in fact, is a tripod: the second is hemispherical in form, footless, and with but one handle (height, 0.085 m., diam. 0.165); around the outside of its lip runs a band of delicately carved spiral ornaments: this vessel is in complete preservation. The third and last of these vessels has the form of a jug (*prochoos*) with one handle; the belly alone is slightly damaged: the jug is 0.27 m. in height, and has upon its shoulder a raised band on which are 17 small ox-heads in relief; four more appear upon the handle.—*Ἀρχ. Δελτίον*, July, Sept.

PALAIOKASTRON.—*Tomb of Sophokles.*—The family grave of Sophokles, belonging to the fifth century B. C., has been found $1\frac{1}{2}$ mile from Palaiokastron, and opened in the presence of the King of Greece. No inscriptions were found, only three sepulchral vases, one of poros, two of marble: from the presence of a mirror and two strigils, two men and one woman appear to have been buried here.—*Berl. phil. Woch.*, 1888, No. 35.

PEIRÆIUS.—Near the summer theatre, have been found, (1) a statue of Asklepios, somewhat over life-size: the face is turned toward the left, and on the nose and the back of the head are slight injuries; the hair behind had not been thoroughly finished, and the hollows for the eyes show that they were made of some other material; the torso is mostly nude, as the himation runs from the left shoulder over the back; the right arm is completely gone, but lines at the shoulder show that it was in some way extended; the left arm and a part of the torso is likewise wanting, but, judging from the smoothness of the surface and the traces of fastening still preserved there, the part lost must have been a separate piece: the lower half of the statue, also formed of a separate piece, was not recovered, with the exception of some bits: there were found also the right hand as far as the wrist, a fragment of the himation and of the right thigh. (2) Fragments of another statue of Asklepios were found, namely, a piece from the back, parts of the foot and of the shoulder, drapery, hand, and serpent attending the god. (3) A statue 0.35 met. high, headless, and representing a draped standing male figure with its left hand enveloped in the himation, is also supposed to be an Asklepios: the right arm from the elbow is missing, but seems to have been supported by a staff. (4) Another statue of the same height and attitude, but rather less enveloped in drapery, is supposed to be an Asklepios. (5) A white marble torso of an undraped youth 0.60 met. high: the head

and all the extremities are missing. (6) The upper half of a draped female figure, 0.23 met. high, of which the head and both hands are missing, supposed to be an Hygieia.

Beside these objects, were found several votive reliefs of rather small size, many fragments of the coils of a serpent, and seven short inscriptions. A votive relief representing the middle of a man's body had the inscription, ΑΘΗΝΟΔΩΡΟΣ | ΑΞΚΛΗΤΙΩ | ΕΤΗΚΟΩ | ΕΥΧΗΝΑΝ | ΕΘΗΚΕΝ.—'Αρχ. Δελτίον, July, 1888. In the locality called Pigada, has been discovered a fragmentary stele with aëtoma and akroteria, bearing the inscription "Demetria daughter of Chairton."—*Athenæum*, Dec. 29.

PYLOS.—Dr. SCHLIEMANN has dug some trial trenches on the akropolis of Navarino, the ancient Pylos, the home of Nestor, and has visited the island of Sphakteria in order to study the cyclopean walls, upon which he is preparing a publication.—*Athenæum*, Dec. 29.

TANAGRA.—*Nekropolis*.—Many tombs have been opened, yielding numerous terracottas. Among the discoveries are two vases with artists' signatures. The first is a red-figured lekythos with four principal figures, each bearing its name in early letters: Artemis hands to the crowned Apollon an eight-sided kithara; behind him and in front of Artemis is a hind; in front of Apollon are the bearded Hermes and Leto who holds a fillet in both hands. Over this scene is an altar on either side of which is a winged Nike with a tripod. The inscription reads ΜΥΞ ΕΓΡΑΦΞΕΝ. The second vase is a red-figured cup with a kneeling hoplite and the inscription, ΦΙΝΤΙΑΞ ΕΤΟΙΕΞΕΝ. Numerous terracottas, draped female figures and male figures with the usual cap and short chiton, were also found. Two tombs of poros stone were uncovered whose unusual depth of 1.05 m. seemed to be owing to a second course of poros blocks added when they were a second time used for burial during the Roman period. Earthenware jars were in several cases found to have served for burial. One of the tombs had a depth below the surface of 3.85 meters: it is the deepest among some 400 opened since February. Several sepulchral stelai inscribed with proper names were brought to light.—'Αρχ. Δελτίον, July, Aug., Sept., 1888; *Berl. phil. Woch.*, 1888, No. 43.

THESPIAI (near).—*New Excavations*.—In the sitting of Nov. 16 of the *Académie des Inscriptions*, M. Paul Foucart, director of the French School at Athens, announced that excavations had been begun at the *ιερόν* of the Muses, near Thespiæ. In the first eleven days of the digging they brought to light the foundations of the temple, some Ionic capitals, fragments of bronze, many inscriptions, among them the dedications of statues erected by the Thespians to Sulla, to Agrippa and members of his family. Five statues also came to light. The excavations will be continued as long as the weather will permit.—*Cour. de l'Art*, 1888, p. 384.

KRETE.

The Greek Museum of Candia has recently acquired two singular sepulchral urns in terracotta, found at Milatos, belonging to the Mykenai epoch. They have the form of *asaminthoi* or *louteres*, and one of them is adorned in dark red, both within and without, with geometric patterns (serpentine or reticulated), palmettes, and motives from the animal kingdom (little fishes swimming). Similar urns were found in Krete on two other sites—at Pentamodi, near Candia, and in Messara, near Gortyna; but, outside of Krete, urns of this particular shape have not hitherto been found, if we may except the fragment found at Tiryns by Dr. Schliemann. Some archaic vases from Prinia have also been acquired, the discovery of which points to a site called Patella, a hill with a levelled top near the centre of the island, on the road between Candia and Gortyna, where there was evidently an ancient Kretan city of unknown name. The akropolis commands the valley of Malevyzi, and the peasants have already brought in thence tracings of fragments of inscriptions as old as the most ancient found at Gortyna. The pedestal of an imperial statue from Gortyna has been bought, bearing the name of an artist hitherto unknown, "Athenaios, son of Dionysios of Paros." A statue of a Roman empress, personifying Demeter, still remains at Gortyna in private hands, also bearing the name of an artist not hitherto known to us, "Eisidotos the Athenian." These inscriptions will be published in facsimile and the urns illustrated in phototype in the forthcoming number of the *Museo Italiano*. The Greek Syllogos at Candia has at length succeeded in obtaining possession of the very important inscription of unknown language, supposed to be Phrygian, discovered a few years ago at Praisos.—*Athenæum*, Nov. 17.

ITALY.

PREHISTORIC AND CLASSICAL ANTIQUITIES.

ANCONA.—*Necropolis*.—Six tombs belonging to the ancient necropolis have been found with their contents undisturbed: these have been placed in the archæological cabinet of the city.—*Not. d. Scavi*, 1888, pp. 488–91.

ANTICOLI-CORRADO.—*Cyclopean wall*.—Signor R. Fonteanive noticed at *La Pezza* a cyclopean or polygonal wall of which a piece 17.40 met. long and 1.47 met. high was preserved, the largest blocks measuring 1.48×0.49 met.—*Not. d. Scavi*, 1888, pp. 459–60.

BELLUNO.—*Latin inscriptions*.—Two inscriptions found here were inscribed on bases of statues; the first, of Salonina, wife of the Emperor Gallienus, the second, of Carminius Papirius Pudens, especially interesting as giving the Latin name (*Catubrinorum*) of the population of this region.—*Not. d. Scavi*, 1888, pp. 407–8.

CAGLIARI (Sardinia).—*Necropolis*.—In the former botanical garden a number of tombs were found containing the usual variety of objects: also a cylindrical shaft of tufa with an inscription probably in Phœnician, some urns, Carthaginian and Roman coins, a bronze mirror, etc.—*Not. d. Scavi*, 1888, pp. 398–9.

A Kufic inscription.—Near the former vice-royal palace, in laying the foundations for new walls, there was found a marble fragment on which is a small part of a Kufic inscription. It is evidently a sepulchral inscription of the IV or V cent. of the Hijra, perhaps of the year 1079 or 1196 A. D.—*Not. d. Scavi*, 1888, pp. 605–7.

CHIUSI.—*Early Lombard inscription*.—During some work carried on in the Cathedral, fragments of a Lombard inscription were found. It is the long metrical epitaph in 17 lines of a bishop whose name is lost.—*Not. d. Scavi*, 1888, pp. 486–7.

CIVITA CASTELLANA = FALERII.—*The ancient Temple*.—In a previous number of the JOURNAL (vol. III, pp. 461–4) a preliminary account was given of the remains of an early temple recently unearthed on this site. Further excavations have made it even more apparent that the temple was destroyed by fire, probably in 241 B. C. It also appeared, from many terracotta fragments, that a smaller building, apparently a temple, stood near the main temple. The final results are exhibited by Count Cozza in the *Notizie degli Scavi*, July, 1888, pp. 414–33.

CUPRA MARITIMA (Picenum).—*Inscriptions*.—At the site recognized to be that of *Cupra Maritima* (called *oppidum* by Pliny, and *urbs* by Mela and Ptolemy) excavations have lately been carried on by Sig. Francesco Comi. The Roman remains consist of fragments of marble columns, capitals and cornices, honorary and private inscriptions, and the remnant of a bronze tablet. What mainly proves the existence here of the curia or forum of the colony are remnants of a calendar and of the public *fasti* of Rome and the municipal *fasti* of Cupra now preserved at Repatransone. The first fragment of the *fasti* reads Q · C · | BELLV(m) . . . | T · ΛQVIL · LIVS · T · F · . . | SEX · LVCCEIVS · T · . . | C · IVLIVS · CAESAR · TE . . . | C · CAESAR · DE · G · . . | ΛD OCEANV(m) The date is 708 U. C., when Caesar triumphed in Rome over the Gallic tribes as far as the ocean. Other fragments refer to the *bellum Actiense*, to the pacification of Italy by Augustus, etc.—*Not. d. Scavi*, 1888, pp. 559–66.

ESTE.—*Excavations in the Fondo Baratela*.—Part V of Professor Ghirardini's memoir is devoted to *Researches and Deductions* (see JOURNAL, pp. 209, 365). It commences by resuming the considerations of Pauli in regard to the inscriptions, that: (1) the tablets were for didactic purposes; (2) the Este alphabet differs from all Italic alphabets (with one exception); (3) the Indo-European character being ascertained, the connection with

the Messapian dialect is evident and shows the Illirian origin of the Este dialect; (4) the people were the Veneti; (5) the earliest date is 160 B. C. Prof. Ghirardini dissents in some respects from Pauli's conclusions. He especially objects to the late date assigned to the earliest Euganean inscriptions, and brings forward many facts to show that the earliest may date from the close of the fifth and certainly from the fourth century B. C. This he determines partly by the character of the objects found in Este tombs of the third period, partly from a more extensive epigraphical comparison than that of Professor Pauli: especially important is the series of *cippi*, whose inscriptions are here published.

The figured works of art are then discussed in regard to their character and period, especially the bronze statuettes: this class of objects often discovered in Northern Italy has been neglected, and the writer here enumerates a great number of similar style to those found in the Fondo Baratela. The art or rather artisanship of these works is purely local and extremely crude: they are mostly attributed to the third century B. C. The same work of comparison and cataloguing of analogous monuments is done for the metal plates with figures. There is a long discussion of the Greek origin of the art which produced the bronze *situlæ* of Northern Italy, and finally an appreciation of the Este culture as a whole, as indicated by the monuments.—*Not. d. Scavi*, 1888, pp. 313-85.

Since the work of Professor Ghirardini was published, further excavations have been made resulting in the finding of several bronze statuettes, many votive nails, shields, fibulae, etc.—*Not. d. Scavi*, 1888, pp. 483-5.

FUCINO (Lake).—*Early bronze inscription.*—In 1877, a plaque of bronze covered with a boustrophedon inscription in old Latin was found in Lake Fucino. No definite interpretation of it has been given: M. Édon has proposed a new reading at a meeting of the *Académie des Inscriptions* (Aug. 17), as follows: CAISO CANTOVIOS A DRVE(*ntiad*) CLANO(*m*) CEIP (*it*) APVR FINEM E(*xtremom*) SALICON.—EN VRBID CASONTONIO (*s*) SOCIEQVE DONOM ATOLER(*ont*) PACTI A(*iris*) PRO L(*ecio*)-NIBVS M(*ile*) A(*seis*) ET SES(*centos*): "Caeso Cantovius took, by the left side next to the Durance, Glanum, at the extremity of the territory of the Salices.—In the city, Casantonios and his companions brought as a recompense to Cantovius, of the sum promised in presence of the legions, sixteen hundred As." M. Édon thinks that this exploit of the taking of Glanum (now St.-Rémy) by an Italian soldier in the Roman service, Cantovius, took place in 218 B. C., and the expedition was that of the three hundred Roman horsemen sent by Scipio in reconnaissance at the beginning of the Second Punic war.—*Paris Temps*, Aug. 18.

MONTEVEGLIO.—*Etruscan antiquities.*—Near this village, in the province of Bologna, some tombs have been pillaged by villagers: the contents resemble

those of the early Bolognese necropolis, not in its most archaic Villanova types but in the second "Benacci" period.—*Not. d. Scavi*, 1888, pp. 410–11.

OLBIA (Sardinia).—*Mile-stones*.—Cav. Tamponi, in his researches on the topography of the region around the ancient *Olbia* especially the course of the Roman roads, has discovered a number of mile-stones in the form of columns with inscriptions. The road they belong to was from Cagliari to Olbia, along a distance of about twelve kilometers. The inscriptions of 44 stones are published, the rest being too much injured to be copied. The emperors mentioned are C. Julius Verus Maximinus, Aurelianus, Valerianus, Marcus Aurelius, Trebonianus Gallus, Julius Philippus, Maxentius, Licinius, Gallienus, Diocletianus, Maximianus, Valentinianus, Valens, Constantinus, Vespasianus, Constantius, Carinus, etc., etc.—*Not. d. Scavi*, 1888, pp. 558–9.

ORVIETO.—*Recent excavations*.—The recent excavations (July to September) have not led to any interesting discoveries. In one of the tombs were found fragments of a red-figured vase with the inscription LEAKKOΣ KALOΣ (read LEAPKOΣ); also two amphoras of the black-figured style.—*Not. d. Scavi*, 1888, pp. 558–9.

PERUGIA.—*Etruscan antiquities*.—At *Ponticello del Campo* a new tomb was discovered, not far from the tomb of the *Volumnii*: it contained several urns. At San Sisto (near Perugia) two urns with inscriptions were found.—*Not. d. Scavi*, 1888, p. 387.

POMPEII.—*Excavations from December 1887 to June 1888*.—Prof. A. Sogliano reports in the *Notizie degli Scavi* (1888, pp. 509–30) on the discoveries at Pompeii between Dec. 1887 and June 1888. It deals mainly with two houses discovered in *Isola 2, Reg. VIII*, Nos. 28, 26. In No. 28 the men's apartment is preceded by a short vestibule; the ample atrium is tetrastyle, with a large impluvium in the centre supported at the corners by four strong columns of tufa. Being back to the city-wall, this and the neighboring houses did not have the advantage of a *posticum*, the place of which was taken by a passage-way. There is a fine large *tablinum* in the rear. No. 26 has a similar arrangement in front: it has an elegant *atrium Tuscanicum* with a very large *impluvium*. The mosaic pavements and other decorative features are finer than in the previous house. Excavations were also carried on in *Isola 7^a, Reg. IX*, and two houses have been completely uncovered. One has a *taberna* attached, and an *atrium displuviatum*. The second has two shops on the front: it also contains a few decorative paintings. A fresco of Cheiron, and the finding of a whole set of surgical instruments show that this house belonged to a physician. A great many inscriptions, painted, scratched, and incised, were found. A remarkably good painting of Dionysos and Seilenos was found at No. 7 of *Is. 4^a, Reg. V*. A complete list of objects found is appended to Professor Sogliano's report.

Dr. Mau goes over the same excavations in the *Bull. Istituto germ.*, 1888, No. 3, pp. 181-207, in which a number of the frescos are reproduced: he designates these houses as *Ins. VIII, 2*.

ROMA.—ARCHITECTURE.—*Tiber*.—On the right bank of the river, opposite the new building of the American College, there have been unearthed a series of constructions of considerable solidity and extent, partly belonging to an immense piscina.—*Not. d. Scavi*, pp. 438-9.

Via Flaminia.—Important discoveries have been made at the first mile beyond the gate, on the Tanlongo (ex-Augustinian) estate. It has been found that an immense surface is occupied by pagan and Christian tombs which it will be possible, at least in part, to excavate and explore. In the second place, there have been found remains of the monumental constructions erected in the fourth century near the subterranean cemetery of S. Valentino. The tombs are at various levels. As far as hitherto found, the lowest are at a depth of 2.50 met. below the present level, and consist of small brick cells. One of these has been entirely explored. Its door, with jambs, sill, and lintel of travertine, is turned toward the public road. Three large arcosolia-niches are opened, one in each of the other walls, each containing a trench large enough to hold four bodies separated by brick transoms. It was afterward made over for later occupants, the floor raised, new loculi added, etc. Above these pagan sarcophagi were some Christian tombs belonging to the great cemetery which was developed, from the fourth to the sixth century, around the basilica of S. Valentino. Many monuments belonging to it have come to light all around. They consist mainly of tombs composed of large terracotta tiles, of terracotta boxes placed underground, and of marble sarcophagi placed above ground.

Many inscriptions, pagan and Christian, came to light, many used for later constructions, many in the walls of the Tanlongo Casino itself. A beautiful metrical epitaph of the year 368 is inscribed on a large marble sarcophagus. Three sculptured sarcophagi were found: one with the Good Shepherd at one end and the deceased child at the other; one with the consular bust of the deceased in a circle; one, the same, with two winged genii supporting the bust, two cocks and two genii playing on the lute and the lyre. Several sculptured fragments were also found.

The excavations were then directed to discovering the remains of the famous basilica erected by Julius I in the middle of the fourth century at the tomb of S. Valentino, which was several times restored and adorned in the succeeding centuries. As many epigraphic fragments, and especially a piece of column of Oriental granite with Ionic base and capital, had been found in the walls of the Tanlongo Casino, this was judged to be the site of the basilica, which was still entire in the fourteenth century and entirely ruined in the sixteenth. Already a part of the ground-plan, with frag-

ments of columns and bases in place, has been uncovered, though not sufficiently to determine whether it belongs to the nave or portico. Several Christian tombs have been discovered below the level of the pavement of the basilica. The following are the consular dates inscribed on the Christian inscriptions: = A. D. 355, 359, 367, 368, 377, 381, 383, 391, 398, 401 (?), 404, 407, 410 (?), 416, 431, 435, 447, 453, 476, 503(?), 523.—*Not. d. Scavi*, 1888, p. 440-59; *Bullettino Comm. arch.*, July, Sept., 1888.

The excavations on the site and in the vicinity of the basilica have been continued. Two other pagan tombs have been found, together with a number of inscriptions. Among the latter was the fragment of an Arval tablet dating from A. D. 20 and containing the proclamation for the great festival of the Dea Dia to be held at the end of May, A. D. 21. Christian inscriptions were found with the following consular dates: = A. D. 365, 366, 376, 395, 397, 402, 408 or 431, 439 or 472.—*Not. d. Scavi*, pp. 500-7.

Via Labicana.—About two meters below the ancient pavement of the Via Labicana, in that part recently uncovered near the entrance to the Wolkonsky-Campanari Villa, was found a very ancient water-course built of great masses of tufa with a large circular hole in the centre: the Claudian aqueduct followed the same course. At the same level there came to light a series of early tombs of the Republican period, built of large rectangular blocks of tufa. In two, the door, with its jambs, lintel and sill of travertine, is well preserved. Sepulchral monuments of a later date lined the road on the right side.—*Bull. Comm. arch.*, 1888, pp. 397-401.

One of the monuments is of great size; its walls built of *opus reticulatum*, its religious area bounded by a wall of great blocks of *peperino*. Inside there still remained in place a large marble slab with the inscription: BAEBIA · SEX · L · PELORIS · | SEX · BAEBIVS · SEX · L · SALVIVS · | L · VITEL-
LIVS · L · F · OV · BARBA · | BAEBIA · SEX · C · L · HALINE · VITELLI · | SIBI ·
POSTERISQVE · SVIS | etc.—*Bull. Comm. arch.*, 1888, p. 332.

Via Salaria.—On the right hand of the road, just outside the gate, a group of early tombs has been found. One circular monument was entirely devastated, others almost destroyed. One in the shape of the shaft of a column contained a small cinerary urn.—*Not. d. Scavi*, 1888, pp. 570-1.

Mausoleum of Constantia.—At the request of Comm. J. B. de Rossi, a slight excavation has been carried on under the altar of the mausoleum of Sta. Constantia, in order to ascertain whether there were any traces of a primitive baptismal font. At a depth of about one meter, the form of the ancient basin became visible, having in the centre an opening like a small square well. At a depth of four meters, was found the regular emissary to carry away the water w. of the Via Nomentana.—*Not. d. Scavi*, 1888, p. 507.

Altar.—Near the church of S. Andrea, on the Quirinal, was found part of a rectangular construction in travertine of the Augustan period, with

holes for marble slabs. It appears to be the altar of the famous temple of Quirinus restored by Augustus.—*Not. d. Scavi*, 1888, p. 493; *Bull. Comm. arch.*, 1888, p. 299-300.

SCULPTURE.—*Marble statue of a youth.*—Professor Ghirardini calls attention, in an interesting paper in the *Bullettino della Commissione archeologica* (Sept.-Oct., 1888, pp. 335-65), to an important statue found some years ago on the Esquiline. It is of a nude youth of athletic frame, whose arms and left leg are entirely gone, together with his right foot. He is represented with one leg much bent and raised, and both arms sharply extended; and Prof. Ghirardini restores him as about mounting into a chariot, one foot resting on the edge and both hands grasping the reins. Such groups were quite frequent in antiquity; among artists who executed them are enumerated Glaukias of Aigina, Ageladas of Argos, Onatas, etc., not to mention later artists. "The Roman statue," the writer remarks, "in the robust breadth of the forms, the rhythm of the proportions, the truthfulness of the posture . . . shows that it is later than the group of the tyrannicides and the Aiginetan marbles . . . and on the extreme limits between the archaic schools and Pheidias and Polykleitos. The type is that of the Apollon of the middle of the fifth century. On the other hand, it is very like the youth in the archaistic group of Orestes and Elektra by Stephanos, and to the youthful head of the same school in the Museo Chiaramonti, which the writer reproduces: the type of both is referred by Conze and Flasch to the close of the archaic period, and by Studniczka to the Peloponnesian school of about 460, and to the sculptor Ageladas. Ghirardini accepts this origin for this charioteer, i. e., attributes it to the school of Pasiteles in imitation of a fifth-century model.

Sculptured altar.—At the corner of the Via Arenula and S. Bartolomeo de'Vaccinari, a marble altar was found in its exact position on a travertine pavement. On the principal side are carved four figures, with toga, crown and covered head, pouring a libation, while two *victimarii* lead towards the altar a bull and a boar, an attendant carries the sacrificial implements, and another plays on the double tibia. The inscription shows that they are the *magistri* of a *vicius* sacrificing the boar to the Lares Compitales and the bull to the Genius of the Caesars. On the sides are single figures of the Lares. The date is 756 U. C. = 2 A. D. It is consequently of the best period of Roman sculpture and of remarkably fine style. It is comparable to the altar in the Vatican (*Sala delle Muse*) with same subject. The interest of the monument is increased by the mention of the name of the street by whose magistrates it was dedicated, *Vici Aescleti*, thus adding another to the names of *vici* of Augustan Rome.—*Not. d. Scavi*, 1888, pp. 498-9; *Bull. Comm. arch.*, 1888, pp. 327-8.

Marble Frieze.—In the Via Ludovisi-Boncompagni were found magnifi-

cent fragments of a large marble frieze. It is carved with foliage and aquatic flowers, and with confronted winged sphinxes in high-relief. The design is elegant, and the execution is of the best period. It has been taken to the Capitoline Museum (*Palazzo dei Conservatori*).—*Bull. Comm. arch.*, 1888, p. 332.

Villa Casali.—In the demolition of some ancient walls on the site of the Casino of the Villa Casali, there were found bricks with the marks of consuls of the year 151, and several marble statues: (1) of Mercury, (2) male figure from a group, (3) badly-preserved female figure; also a number of inscriptions.

Nunnery of the Sisters of Cluny.—Near here were found: (1) a draped and seated female statue; (2) a draped male statue badly broken; (3) some inscriptions.

Via Galilei.—Was found a marble reproduction of the legendary Roman wolf, similar in size and position to the famous Capitoline bronze, except that the head must have been bent toward the twins: the head, all four legs, and some minor pieces are wanting.—*Not. d. Scavi*, 1888, pp. 434-6.

MOAICS.—*Church of S. Lorenzo in Panisperna*.—There has come to light, here, a beautiful colored mosaic which formed the pavement of a small bath-room. Though it is in part wanting and disfigured, what remains is of great artistic excellence and of marvellous delicacy. It represents a great variety of fishes, crustacea, and mollusks swimming in the sea, given with the most perfect realism of form, color, and details. The background is sea-green. The central group is remarkably good in which a large polyp is grasping an aragusta which in its turn holds a lamprey. Around the mosaic is a broad frieze with elegant foliated volutes among which are many-colored birds, reptiles, and other small animals. This decoration must have belonged to magnificent baths of the best period.

Within a wall were found a large number of sculptured fragments, among them, two statues of Bacchus and torsos of Diana and Mercury.—*Not. d. Scavi*, 1888, pp. 437, 491-2.

Villa Patrizi on the Via Nomentana.—*Mosaic*.—In freeing a small bath-room (*sudatorium*), its pavement was found to consist of a black and white mosaic representing the life-size figure of an athlete raising his right hand to his head, as if in the act of crowning himself, while in his left he holds a palm. The head, left shoulder, and part of chest are destroyed: the middle of the body had been anciently restored. His name is inscribed in large letters, EVTY|CES| QV|IET| NYN| NYS.—*Not. d. Scavi*, 1888, 459.

INSCRIPTIONS.—*Ancient Roman Calendar*.—Near *S. Martino ai Monti* have been found some fragments of an ancient Roman calendar antedating 742 U. C., containing a number of interesting facts relating to festivals in April, including the feast of Ceres (LOID · CERERI) on the 18th, to which

on the 19th is added . . . CERERI LIBERO [LIBERAE]: on the 21st come the PARilia, in honor of the foundation of Rome, and on the 23rd the VINalia, as the day was devoted to tasting the new wine.—*Not. d. Scavi*, 1888, pp. 389-90; *Bull. Comm. arch.*, 1888, p. 301.

Betitus Perpetuus Arzigius.—Near the altar of Quirinus (?) was found the base for a statue with the following inscription: ARZYGII | TON ΑΠΑCΑC ΤΑC ΠΟΛΕΙC ΤΗC CΙΚΕ | ΛΕΙΑC ΑΝΑΝΕΩCΑΝΤΑ ΚΑΙ ΤΑ ΒΟΥ | ΛΕΥΤΗΡΙΑ ΚΑΛΩC ΔΙΟΙΚΗCΑΝΤΑ | ΤΑC ΤΕ ΛΙΤΟΥΡΓΕΙΑC ΙΔΙΑΙC ΕΠΙΝΟΙ|ΑΙC ΕΠΙΚΟΥΦΙCΑΝΤΑ ΚΑΙ ΕΝ ΠΑCΙ ΤΗΝ | ΕΠΑΡΧΙΟΝ ΕΥΕΡΓΕΤΗCΑΝΤΑ ΒΕΤΙΤΙΟ- | ΠΕΡ- ΠΕΤΟΥΟΝ ΤΟΝ ΛΑΜΠΡΟΤΑΤΟΝ | ΠΑΤΡΩΝΑ ΑΙ CΙΚΕΛΩΝ ΒΟΥΛΑΙ | ΚΑΙ Ο ΔΗΜΟC ΑΝΔΡΙΑΝΤΙ ΤΟΝ | ΕΥΕΡΓΕΤΗΝ ΜΕΤΑ ΔΙΕΤΙ|ΑΝ ΤΗC ΠΡΑΞΕΩC ΔΙΑ ΠΡΕC | ΒΕΥΤΩΝ ΡΟΔΙΝΟΥ ΚΑΙ ΙΟΥΛΙ|Α ΝΟΥ ΤΩΝ ΔΙΑCΗΜΟΤΑΤΩΝ | ΔΕΚΑΠΡΩΤΩΝ ΗΜΕΙΥ- ΑΝΤΟ. Betitus Perpetuus Arzigius, to whom this statue was erected perhaps in his palace, is already known through an inscription from Sicily itself, whose cities dedicated this work to him in memory of his good administration. The date of his governorship is between 330-37, when those invested with this dignity had ceased to bear the titles of *consularis*. He is different from the almost contemporary person of the same name who was governor of Tuscia and Umbria after 370.—*Not. d. Scavi*, 1888, pp. 493-6; *Bull. Comm. arch.*, 1888, pp. 391-4.

The marble plan of Rome.—In demolishing a wall near the Farnese palace, many small pieces of the famous capitoline marble plan of ancient Rome have been recovered. The entire plan, so far as discovered in the Forum in the sixteenth century, remained in the Farnese palace up to 1743, when it was transferred to the Capitol. A quantity of small fragments were neglected and used as refuse at the time: most of these have been recovered—one hundred and eighty-eight in number—and will be joined to the larger ones in the museum. It is expected soon to seek for other parts of the plan by excavations back of the *Templum Sacrae Urbis*, where the plan was originally placed.—*Not. d. Scavi*, 1888, pp. 391, 569; *Bull. Comm. arch.*, 1888, pp. 385-7.

The College of the Piscatores and Urinatores of the Tiber.—An important fragment of an inscription relating to this *Collegium* has been found on the banks of the Tiber. It was set up in honor of one of their benefactors, whose name at the beginning of the inscription is lost.—*Not. d. Scavi*, 1888, p. 279; *Bull. Comm. arch.*, 1888, pp. 387-9.

MS. NOTES ON ANCIENT ROME BY PIRRO LIGORIO (1550-70).—Professor Middleton read a paper before the London Society of Antiquaries (meeting of Dec. 13) on a volume of MS. notes on ancient Rome (now in the Bodleian Library) made by Pirro Ligorio, the architect, between 1550

and 1570. These notes are illustrated by sketches and measured drawings of a great number of buildings now destroyed, and are, therefore, of much value on many points connected with the topography of ancient Rome.—*Athenæum*, Dec. 22.

FRENCH SCHOOL.—M. A. Geffroy has been named, through the *Académie des Inscriptions*, Director of the French School at Rome, to succeed M. Edmond le Blant who has occupied this post for six years. This will be a position familiar to him as he was M. le Blant's predecessor.

RUVO (Puglia).—*Bronze statuette of Hermes.*—Outside of Ruvo, a workman found a bronze statuette, 8 centimeters high, of Hermes with the ram. The figure is nude, except for the chlamys which hangs down the left arm. The figure rests on the right leg, as if moving forward: the lowered left hand holds the caduceus: the extended right arm has lost its hand. At his feet is the ram. This is evidently the reproduction of a large marble original whose author is as yet unknown. The art of the statuette is admirable, and to be attributed to a developed period: the forms are correct and slender, and the anatomy good.—*Not. d. Scavi*, 1888, pp. 533-5.

SERVIGLIANO.—*A bronze candelabrum.*—A fine bronze thymiaterion or candelabrum has come to light here, 40 cent. high, similar to many others found in Etruscan tombs, usually attributed to the third century B. C. It consists of a female figure, standing on a base formed by three human legs, upon whose head rises the shaft that supports the concave dish above, on which are four doves.—*Not. d. Scavi*, 1888, pp. 413-14.

SYBARIS (territory of).—*Excavations of the necropolis of Torre Mordillo.*—Professor A. Pasqui completes in the last two numbers of the *Notizie degli Scavi* (August, p. 462; Sept., p. 575) his catalogue of the contents of the tombs found in this necropolis: it includes tombs XLIX to CLIII. This new material does not alter the conclusions drawn in the last number of the *JOURNAL* (vol. IV, pp. 370-2). The great mass of objects are of minor value artistically, and clearly show that a poor class of people were buried in this necropolis.

SICILY.—**SELINOUS.**—*Excavations among the temples.*—Professors Patricolo and Salinas have recently reported on the work accomplished at Selinous during the three years 1885 to 1887. It has not been directed towards any single excavation, but rather to the verification of all the monuments already known, and to their cleaning from vegetable growth. This has led, however, not only to a rectification of the already published plans, but to the discovery of further remains of considerable interest. In the following report an account is given of the discovery of the fortifications north of the so-called akropolis, of the excavation of the basement of temple O, of the cistern P, and of the cleaning of the buildings attached to the N. side of the propylæa Q. The numeration of the monuments proposed by Serra-

difalco in 1834 is preserved; those discovered since then are designated by succeeding letters.

Discovery of the use of the Semicircular Arch as a decorative element.—The first step toward new excavations at Selinous was evidently the determination of the circuit of the akropolis wall and its entrances: a work also important in itself for historical reasons. This work ought to be commenced on the *N.* side, at the present entrance, corresponding to the wide road traversing the akropolis from *N.* to *S.* To do this a railroad was necessary. A beginning on this work was made in the spring of 1887. It is extremely interesting to have recovered so important an example of Greek fortification; and, as the reporters remark, "of great importance in the history of art is the finding of the semicircular arch used as a decorative element in Greek buildings; and the use of the arch will lead to new artistic judgments, if an account be taken of the gateway of Ainiai in Akarnania and the Sicilian counterparts in the Phœnician walls of Eryx and those of the theatre of Egesta. It is also important to restore to its function of a tower the semicircular building *M*, lately thought to be a theatre, and to obtain information regarding the buildings adjacent to the so-called temple discovered on the Messina estate beyond Selinous, and now marked *Q*, whose character as propylæa becomes ever more certain."

Outside the *N.* wall of the akropolis, the building *M* was already excavated and the existence of another building at the *W.* end was known, considered by Serradifalco and all his successors to be of square shape. In 1885, the excavations showed it to be a semicircular tower, like *M*, and in 1886 were uncovered the walls which joined tower *H* to the wall, which in its turn united tower *M* to the wall of the akropolis. The following had been uncovered when the report was written. (1) The corridor from *W.* to *E.*, 73.40 met. long and 2.56 met. wide, closed by two main walls; in the small portion explored, there were two small doors, one being covered by a semicircular arch of four blocks and a key-stone. The door is 2.68 met. high, 1.05 met. wide at bottom, and 1.00 met. wide at top. The technique is the same as that of the walls of the akropolis. Portions of arches of a similar form have been found in the few openings made in the space between the corridor and the *N.* front of the akropolis. (2) A newly-discovered long piece of wall joined the present *N.* front of the akropolis to the semicircular building *M*: against the end of it is the beginning of a great wall running parallel to a corresponding one at the opposite end; and in it was found a door with beginnings of walls attached at right angles: two other doors evidently existed in corresponding positions. (3) The semicircular tower *H*, attached to the *W.* end of the corridor is joined to another main wall running from *N.* to *S.* which has been uncovered only along a short space. Dr. Richter decided to attribute to the Roman period

the arches of Eryx and Egesta, but these discoveries at Selinous prove the use of this form by the Greeks. Another point to be especially noted is, that the name of theatre given by Cavallari, Benndorf, and all since that time (1862) to *M* is now clearly proved to be a mistake. As before remarked, *M* is a tower.

The remains of a temple marked *O* were uncovered to the s. of *A*, until now considered the southernmost temple. The modern edifice in which it was enclosed has been removed.

The cistern *P*, about which so little has been known, was thoroughly explored. It was found to be a rectangular construction divided by three piers into two equal compartments. It is built of large masses of tufa well-squared, on which are some remains of plastering. Its length from s. to s. is 5.23 met., its width is 3.20 met.; on the piers rest, lengthwise, four great architraves, which support the slabs of the roof that also rest on the side-walls. From the lower edge of these slabs to the pavement the measurement is 2.51 met. It belongs to the good period.

At the same time that in 1874 a so-called temple was discovered near Selinous on the Mestana property, some constructions attached to it were found which were never published. They are, however, of great importance, flanking the central building on both sides. That marked *B* is finely preserved. Inside, a bench encircles nearly three of its sides, and on the E. N. E. front is an entrance with pilasters. The entire construction has the undoubted character of propylæa, the central portion of which has two columns at either end (*cf.* those of Sunion and Eleusis). Its relation to the nekropolis of Selinous will be apparent only after further excavations.

In 1885, on a block in temple *C* the very remarkable discovery was made of a *Phœnician letter*, undoubtedly an *aleph*: it was a tufa block (1.10 met. long, 0.56 m. wide, and 0.44 m. high), found outside the temple to the s.

Of considerable interest for the polychromy of architecture is a small fragment of the cornice of the small building *B*, cut in tufa covered with stucco: though only 8 cent. long by 6 high, it preserves the blue of the front and field of the mutule, the red band of 9 mm., and a part of the yellow front above it. There were also some unusual fragments of painted terracotta.—*Not. d. Scavi*, 1888, pp. 593–605.

CHRISTIAN ANTIQUITIES OF ITALY.

Bust of Mantegna and the head of Strozzi.—There are interesting notes in the *Courrier de l'Art* (October 19), by M. C. de Fabrizy, respecting the famous bust of Mantegna over his tomb at Mantua (commonly ascribed to Sperandio), and a unique medal in the Berlin Museum signed *Opus Sperandei*, which, Dr. J. Friedländer thinks, is a portrait of the painter Baldassare Estense. M. de Fabrizy gives good reasons for supposing that the

bust is not the work of Sperandio, but of Bartolommeo di Virgilio Meglioli, the Mantuan medallist. It seems to be certain that the face on the medal at Berlin is that of Tito Strozzi, but there are doubts whether the medal itself is not a forgery.

FIRENZE.—*Gift to the Belle-arte.*—It is reported that Louis-Charles Carraud, of Lyon, son of the famous expert who formed the Soltykoff collection, has bequeathed his large and fine collection of works of art to the National Museum of Fine Arts in Florence. The collection is valued at over a million and a half, and contains paintings, ivories, bronzes, and ancient jewelry: the collection of ivories is especially noteworthy.—*Chronique des Arts*, 1888, p. 243.

A German Art-Institute.—Professor August Schmarsow, well known for his important historical studies on Italian art, arrived in Florence in August with some students and Ph.D.s from Germany. The object is to found in Florence a German Institute for the history of art. During the winter the history of Italian sculpture up to Michelangelo will be studied, and one of Vasari's lives of Painters will be commented.—*Archivio Storico dell' Arte*, 1888, p. 334.

ROMA.—**REPRODUCTION OF THE VATICAN ARCHIVES.**—On the occasion of the Jubilee of Leo XIII, the Vatican Archives have published a collection of facsimiles of the Pontifical *Regesta*, under the title, *Specimina palaeographica Regestorum Romanorum Pontificum ab Innocentio III usque ad Urbanum V.* This collection contains 60 folio heliotype plates from documents dating from 1198 to 1370 to show the development of the official writing: price 90 francs: address *Rmo. D. Pietro Wenzel, primo Cust. dell' Arch. Vaticano.*—*Bibliothèque École des Chartes*, 1888, I, p. 145.

SPAIN.

ROMAN INSCRIPTIONS from Paredes de Nava (I, p. 329), Avila, (I, p. 332), Tuluvera de la Reina (I, p. 338), Torres (I, p. 341), and Segovia (II, p. 309) are given in the *Boletin R. Academia de la Historia*, 1888.

AVILA.—*Church of Santiago.*—Two inscriptions in Arabic recently found in the walls of this church show that the tradition was correct which considered this church to have been a mosque at the time of the Moors.—*Boletin R. Academia de la Historia*, 1888, I, p. 144.

BARCELONA.—*Roman Inscriptions.*—Of two Roman inscriptions, recently found here, one is to L. Licinius Secundus and reads as follows: *L(ucio) Licinio | Secundo, | accenso | patron(o) suo | L(ucio) Licin(io) Surae | primo secundo ter|tio cons(ul)at(o) eius, | | | | a(ugustalis) col(oniae) | J(uliae) V(ic)tricis) T(riumphalis) Tarr(aconensis) e(t) col(oniae) | F(aventiae) J(uliae) A(ugustae) P. Barcin(onensis) | M(arcus) Antonius Antu(illus) cives Conven(arum) amico.*—*Boletin R. A. H.*, 1888, II, pp. 274, 343.

COFIÑO (Asturias).—Consular Inscription.—The following inscription was found at San Miguel de Cofiño: *Monumentum p(ositum) diis omnibus m(an)ibus Scopcia Onnaca Ummaia Caelionigae, ex gente Penioru(m), anno(rum) XV. Pater filiae g(arissimae) possuit, D(omin)o n(ost)ro Pos(tumo) IIII et Vict(orino) co(n)s(ulibus).* Besides the date of 266 A. D., this inscription is interesting as giving a number of native names: the father, Scopcia Onnaca; the daughter, Ummaia Caelioniga; and the tribe or gens of the Penios or Peniores.—*Boletín R. A. H.*, 1888, II, p. 170.

GERONA.—Hebrew Inscription.—An important Hebrew inscription, belonging to the synagogue and dating from the XIII or XIV century, has been found: it has been published in the *Revue des études juives*, t. XVII, pp. 149–51. It records the construction of the building, but the date has been broken away.—*Boletín R. A. H.*, 1888, II, pp. 324–6.

HASTA REGIA.—Early Roman Inscription.—Professor Hübner restores an interesting inscription found on the site of Hasta Regia, the ancient and celebrated metropolis of Turdetania, the ruins of which are situated near Jerez de la Frontera. The inscription is of the Republican period and is thus restored:

*q. antonius l. f. . . l. b | AEBI | VS · P · F | SER · T · | fabius t. f. . . c. cornelius l. f. . .
muros portas turresque · SVA · PECVNIA restituerunt idemque probarunt.*
—*Boletín R. A. H.*, 1888, II, pp. 17–25.

MAHON (Minorca).—Roman antiquities.—The governor of Minorca has brought to light some Roman antiquities at the military hospital of Mahon. The most important find is that of a superb and large mosaic representing many animals and birds, for the greater part natives of the African continent: it resembles a mosaic recently found in Tunis.—*Boletín R. A. H.*, 1888, II, p. 7.

FRANCE.

BOULOGNE-SUR-MER=BONONIA.—Two fragments of inscriptions were discovered relating to an officer of the Roman navy who had served in the British navy whose stationing port was Bononia. This inscription is important as better showing the importance of Boulogne at the time of the emperor Claudius, when a fleet in constant relation with Britain was attached to this port.—*Paris Temps*, Sept. 8.

LEGOUX (Puy-de-Dôme).—Dr. Plicque has recently discovered here a bronze head of which a photograph was presented by M. Héron de Villefosse to the *Acad. des Inscr.* (July 20). This head, of remarkable execution and surprising style, represents a bearded figure whose head is surmounted by bull-horns. It probably represents a river, and reminds one of the river Achelouia. Greek coins show a number of rivers represented in this way.—*Paris Temps*, July 21.

MONTIVILLIERS (near Havre).—A part of the ancient abbey church of Montivilliers, near Havre, a magnificent relic of the thirteenth century, has been destroyed by a fire originating in an adjoining private house. The noble Romanesque tower suffered greatly. A portion of the Gothic nave of the building has suffered equally.—*Athenæum*, Dec. 1.

NARBONNE.—*Mile-stones*.—M. Héron de Villefosse announces the discovery of a mile-stone, important as showing, what had been contested, that the Gallic emperors had occupied a part of the right bank of the Rhone. As they reigned over the Spanish provinces they must have ruled also over the provinces between the Rhone and Spain. This is the fifth inscription showing this fact.—*Paris Temps*, Aug. 18.

PARIS = LUTETIA.—*The Arenæ of Lutetia*.—M. Lisch, who is at present superintending the restoration of the arena, reports that the aspect of the amphitheatre is already reproduced in its essential parts, and that the uncovering has successively been accomplished of the walls of the main entrance with their immense circular niches, the podium which surrounds the arena, the cellae, the scena, and the theatre with its end-wall whose length is not less than 44 meters; this wall is now being restored. The steps of the amphitheatre, which extended into the *Rue Monge* and could seat 12,000 people, are also being restored; they were wide, measuring 1.20 by 0.39 met. A provisional museum has been established by the care of M. Maurice du Seigneur, containing the numerous sculptures discovered, casts of the skeletons, pottery and vases found during the excavations of the last five years.—*Chronique des Arts*, 1888, pp. 247-8.

Monument of Philippe Pot.—The State has purchased the important sculptured monument of Philippe Pot, great senechal of the duchy of Burgundy, who died in 1494. It was bought by an inhabitant of Dijon at the time of the suppression of the abbey of Cîteaux. Philippe Pot is represented armed from head to foot, reclining on a slab (bier) borne by eight mourners in costume of deep mourning, each holding a shield of the alliances of the defunct. It is a work of great historic value and one of the most important examples of Burgundian sculpture.—*Cour. de l'Art*, 1888, p. 377.

Catalogue of Oriental Coins.—We are glad to welcome the first volume of a catalogue of the Oriental coins preserved in the Bibliothèque Nationale at Paris, published under the title, *Catalogue des Monnaies Musulmanes de la Bibliothèque Nationale*. Publié par ordre du Ministre de l'Instruction Publique. Par M. Henry Lavoix, Conservateur Adjoint du Département des Médailles.—Tome 1. *Khalifes Orientaux* (Paris Imprimerie Nationale).—*Athenæum*, Nov. 10.

Collection of Squeezes of Roman Inscriptions.—The Minister of Public Instruction has decided to form a collection of squeezes from inscriptions to be placed in the Bibliothèque Nationale. The origin of the plan is thus

spoken of in a circular: "The examination of the scientific papers of M. Léon Renier has brought to light a large number of squeezes of Roman inscriptions collected both in France and in North Africa. On account of the interest of these documents for epigraphic science, I have ordered a preparatory classification of them in a hall of the Bibliothèque Mazarine, with the view of serving, later, for the formation of a cabinet of squeezes to be installed at the Bibliothèque Nationale, accessible to workers." The Minister then appeals to private individuals and to societies to increase this collection.—*Biblioth. École des Chartes*, 1888, I, p. 143.

Reorganization of the Administration of the Museums.—By decree of the President of the Republic, the administration of the Museums has been reorganized, including the Louvre, Luxembourg, Versailles, Saint-Germain, etc. The Louvre is divided into six departments: (1) paintings, drawings and chalcography, with one *conservateur*, two *conserv.-adjoints* and one paid *attaché*; (2) Greek and Roman antiquities, with one *conservateur* and one *conserv.-adjoint*; (3) Oriental Antiquities, with one *conservateur*, one *conserv.-adjoint* and one paid *attaché*; (4) Egyptian Antiquities, with the same officials; (5) Sculpture and works of art of the Middle Ages, Renaissance and Modern times, with *ditto*; (6) Marine and Ethnography, with one *conservateur*. The museums of the Luxembourg, Versailles and St-Germain each has one *conservateur* and one paid *attaché*. The salary for *conservateurs* varies from 5000 to 8000 francs, for *conservateurs-adjoints* from 4500 to 5000, for *attachés* from 2500 to 4000. The latter are to be chosen, in preference, from the pupils of the École du Louvre, École Française d'Athènes, École Française de Rome, École des hautes études, École des chartes, École normale supérieure, etc.—*Cour. de l'Art*, 1888, pp. 292-4.

Archæological Mission to Indo-China.—*Siam and Cambodia antiquities in the Trocadero.*—At a recent meeting of the Paris Geographical Society, M. Fournereau—who had been charged with an archæological mission to the Kmer ruins of Siam and Cambodia in order to complete the collection of Cambodian antiquities now in the Trocadero Museum—read a report of his explorations; from which it appears that he has brought back with him 520 casts, 13 original pieces, and 400 photographs of monuments which he inspected in the provinces of Siam, Phnombudong, Nokor-Vat, and Cambodia: also a number of architectural drawings and surveys, with plans of different monuments, which give a very fair idea of the ancient city of Angkor-Vat and one or two other towns. He went on to Angkor-Thom, with its avenues of giants bearing up enormous nagas, its heavy gates flanked by elephants, its grand temple with 50 towers grouped in the form of a pyramid and forming 50 quadruple heads. After taking casts of all the most interesting parts of these edifices, he went to several other places. He is now arranging the fragments brought home and fitting them in with

those which the museum had before, so that the collection of Kmer and Cambodian antiquities will be very complete.—*London Times*, Nov. 24.

QUIBERON.—A dolmen has just been opened in the middle of the village of Roc-en-And, Quiberon, but nothing was found in it except two whorls and some fragments of very coarse pottery. The dimensions of the chamber were 12 ft. square and 6 ft. under the capstone.—*Athenæum*, Sept. 29.

VÉZELAY.—*The Abbatial Château*.—M. Adolphe Guillon has conducted excavations to find the site of the primitive château of the abbots of Vézelay, built in the twelfth century. Several walls have been uncovered. The façade faced east. There were many apartments in it: especially remarkable was the hall in which the Council was held in 1145 at which St. Bernard preached the second crusade. It was demolished about 1760.—*Cour. de l'Art*, 1888, p. 336.

GERMANY.

BERLIN.—*Additions to the Museums*.—In the *Jahrbuch d. archäol. Institute* (1888, No. 3), a report is made on the additions to the Royal Museums during 1887. To be noticed are (1) a series of objects from the archaic Roman necropolis on the Esquiline, under *Misc.-Inv. 7981-8002*; *Vasen.-Inv. 3084-3121*; *Terracotten.-Inv. 8044-8150*: among these is a series of bucchero vases of the earliest kind. Especially remarkable is a hand-made bowl whose edge is decorated with knobs and rings of bronze; in it were found a number of very archaic bronze fibulae: (2) a number of early Greek vases, made in Italy or Sicily, in imitation of the so-called proto-Corinthian and early-Corinthian styles: (3) a series of small terracotta altars with reliefs, some of them archaic; (4) a mass of small Egyptian objects—idols, amulets, porcelain and glass objects. (5) Antiquities from a sanctuary near Idalion in Kypros, excavated in 1885, of which the most interesting are some early fragments, especially heads belonging to terracotta female statues of a distinctly Semitic type, with very gorgeous decoration and many remains of painting: the ankles and wrists, the fingers and toes, and even the nose, are adorned with rings; and the earrings, necklaces and diadem are very elaborate. There are some examples of the nude female figure with hands pressed to her breasts, and many small terracotta female figures holding musical instruments or fruit. The sculptures in stone are also for the greater part female statues of both the Oriental and the developed-archaic Greek types: the latter are followed by a series in the free-lax style. From the presence of a doe it would appear that the female divinity represented in these figures corresponds to Artemis rather than to Aphrodite. (6) A further series of Kypriot antiquities comes from Polis-tis-Chrysokou (near Marion), purchased at the sale in Paris. Among these are a beautiful necklace of gold and carnelian; heavy silver bracelets; spiral silver rings;

gold earrings of free Greek style; a beautiful purely Greek (c. 400 B. C.) bronze stand or base, with figures that are the prototypes of those on Etruscan mirrors. Among the earthenware are several series both of local manufacture and of imported wares, especially Attic. Of the local vases the most interesting have on the shoulder a female figure holding a small pitcher which serves as a side-outlet; the figures are mostly of advanced archaic Greek style, and the decoration is an interesting combination of imported Greek and native motives. The greater part belong to the sixth or early-fifth century. There are a number of sculptures in sandstone from graves. (7) From early tombs near Thebes comes a collection of terracotta vases and objects in bronze, including large and small geometric vases of the Dipylon style, small proto-Corinthian lekythoi: remarkable is a large pitcher, unique in shape and size, belonging to the proto-Corinthian type: but of greatest interest is a series of local Boiotian vases, whose existence was first discovered in 1878. (8) Among other single acquisitions are (A) ten fine cut-stones, several of early Greek workmanship: (B) several bronzes, among which are (a) a nude archaic "Apollon"-figure from Dodona; (b) a pitcher from Sidon, of early Greek work; (c) a large hydria from Eretria; (d) a mirror to which is attached a relief of Aphrodite ἐντραγία, seated on a he-goat: (C) some vases: (D) a series of 24 Myrina terracottas.

New Catalogue of Museum.—The new catalogue of a portion of the Berlin Museum, compiled by Dr. Bode and Herr von Tschudi, has been published. It is devoted to the works of plastic art in the collection, including carvings in wood, marble, and stone, toreutic examples, and terracotta works. Much of the book, which will be welcome to students, is, of course, given to Italian examples from Lombardy and Venice, productions of the Pisani, *etc.* The most interesting section relates to the fifteenth century, which has long been Dr. Bode's special study. The specimens are arranged in chronological order, and grouped according to schools and hands, including the *plaquettes*, which have lately attracted much attention. There are numerous specimens of Donatello, Michelozzo, Rosellino, Desiderio da Setignano, Verrocchio, the Della Robbia, Riccio, Antonio da Brescia, and many more. Sixteenth-century work begins with Michel Angelo's statue of John the Baptist, not long since added to the museum. German works and specimens in uncommon materials, such as speckstein, as well as those in silver and wood, have ample attention. Every specimen is most carefully and thoroughly described, and its history related in smaller type. The book is amply illustrated.—*Athenæum*, Dec. 15.

HILDESHEIM.—*Frescos in the Cathedral.*—The *Centralbl. der Bauverwaltung* reports that, in cleaning the wall on the south side of the cloister, were discovered frescos, covering almost the entire length of the corridor, which, on account of their extent and the beauty of their design, are of the

highest interest. The compositions, which are very faint, cover the upper half of the wall and comprise twenty square compartments, each containing two male figures in lively action. Under each group was, apparently, an inscription in Gothic minuscules. The writing, the drapery (with the closely-fitting undergarments, over which is thrown a broad mantle), the slender proportions of the bodies, all bear the signs of late Gothic or very early Renaissance. The undergarments are usually light in color, the mantles dark: the faces are hardly recognizable. Signs of painting had already been discovered in the north cloister.—*Mith. oest. Museums*, 1888, p. 204.

KEMPTEN = CAMPODUNUM.—On the site of the Roman forum of ancient Campodunum in Bavaria (the modern Kempten) some excavations have taken place, and the remains of a villa discovered with part of the hypocausts still preserved, the præfurnium being entire; and, moreover, the substructions of a large columned hall, which may have been a temple or a palace.—*Athenæum*, Oct. 27.

KÖLN.—*New Museum.*—On Aug. 14 was opened the new Historical Museum which is established in the old "Thorburg": its object is to give an idea of the history and condition of the ancient *Urbs Ubiorum*. It aims to collect and present in an orderly manner all the relics preserved in private and public collections.—*Köln Ztg.*, in *Mittheil. oest. Mus.*, 1888, pp. 203-4.

MAINZ.—*The Roman Cemetery* in the *Neuen Aulage*, at Mainz, has yielded interesting results to the *Alterthumsverein*. Up to the present, about thirty Roman graves have been uncovered and the most varied modes of interment have been found. In the same place, coffins of stone, wood and lead have come to light.—*Mittheil. oest. Mus.*, 1888, p. 224.

MEHRHOLZ.—*Roman pontes longi.*—Two plank-walks have recently been discovered between Mehrholz and Brägel. They are of Roman origin, and bear all the marks of the already-known Roman bridges over moors and swamps. The two run parallel from one end to the other of the moor: one bears signs of having been destroyed, and the other of having been repaired, even in Roman times. They appear to be the famous *pontes longi* which were built by the Roman general Caecina in 15 A. D. on his retreat to the Amisia (Ems).—*Berl. phil. Woch.*, 1888, No. 40.

OBERNKIRCHEN.—*A Carolingian Crucifix.*—Another has been added to the small list of German crucifixes of the Carolingian period. G. Schöne-mark has a paper on this crucifix in the *Zeitschrift für Christliche Kunst* (1888, No. 9). It is in the church of Obernkirchen near Bückeburg. The cross and the figure of Christ are of wood, and the body of Christ is completely draped.

AUSTRIA-HUNGARY.

ARCHÆOLOGICAL DISCOVERIES.—Reports have lately appeared in Austrian and German papers of discoveries of Roman antiquities made within

the last few weeks. At **DOSOJ**, in Bosnia, the remains of a fortress, erected probably to hold the Dacians in check, were traced by Dr. Tuhelka, who is the *custos* of ancient monuments in Bosnia. They lay on the summit of a cliff, which is at the junction of the Bosna and Usura, and were covered with a shallow layer of mould. The ruins formed a series of terraces, at the highest point of which was a sort of citadel. An inscription was found, which showed that at some time the first Belgic cohort was in garrison at the spot. The utterly shattered condition of the remains of masonry, which are simply rubbish, indicates that they have been the scene of some great catastrophe. It has been suggested that an earthquake may have been the destructive agent, for a quantity of broken skeletons have been found buried in the greatest confusion all over the place in crumbled masonry and mortar. The place is an admirable situation for defense, being practically impregnable on two sides; and it dominates the surrounding country. Various articles, such as would be likely to be found in a Roman military colony, have been collected from the ruins. At **DEUTSCH ALTENBURG**, supposed to be the site of the ancient **CARNUNTUM**, not far from Pressburg, the outline of a circus has been traced, and much of the interior has been laid bare. The place has been for centuries tilled, all the remains being covered over with a rich loam, in some places only a few inches deep. This has, no doubt, chiefly contributed to the very perfect preservation of the ground-plan. The *Oderzeitung* reports the finding in the Lossow district, near **FRANKFORT ON THE ODER**, of about 30 clay vessels of various sizes and patterns, some urns, some pots, deep saucers, flasks, *etc.* They were filled with the ashes of burnt corpses mixed with sand. The color was a brownish yellow; some were broken, and the fractures showed that coal ashes had been mixed with the clay of which they were made. Some bronze needles were found with them, being finished at the top in a semicircular shape. The vessels seem to have been formed on a lathe, tolerably smooth, regular in shape, and only slightly baked. The largest were about 30 centimeters in diameter at the widest part, and 26 centimeters high. The ornaments were either triangles or semicircles scratched on the surface with points impressed on the surface. Possibly the site where they were found was a refuge and a place of sacrifice in old German times.—*London Times*, Sept. 8.

EINING=ABUSINA.—The excavations at Eining on the Danube, the ancient Abusina, have been concluded for the present year. Early next year the prætorium will be cleared out, and also the camp gates. The ruins prove to be vast and imposing. The discoveries of the present year include some very fine lance-heads, a sword and scabbard, female ornaments, a stilus, brick stamps of the third legion and of various cohorts, *etc.* Amongst the pieces of glass is one inscribed GLVCV.—*Athenæum*, Oct. 20.

LESINA (island of).—*Prehistoric cave of Grabak* (Humac).—The excava-

tions in this cave are not yet finished: the results up to the present are as follows. The cave of Grabak is about 250 met. above the present sea-level: it consists of a single cavity 26 met. long by 23 wide, and its soil is made up of various strata: eleven distinct strata of ashes were found between which were strata of *terriccia*, while under them all is one of sand. These strata contained a great quantity of bones of different mammals, mingled with shells and products of primitive industry, as well as remains of human bones: there are no traces of metals. There were utensils and arms made of stone and terracotta, among them the usual prismatic knives of silex, a hammer, crushers, and pieces of early pottery. All the remains appear to belong to the neolithic period.—Professor R. GASPERINI, in *Bull. Arch. Dalmata*, 1888, No. 10.

VIENNA.—The annual *Vorlegeblätter* will shortly be ready. The new series will be specially interesting, from its giving us in a convenient and accurate form the best of those archaic Greek vases which bear the names of the painters or potters from whose establishments they issued. This series of signed vases comes down to and includes the work of *Exekias*. From the specimens we have seen, Prof. Benndorf is to be again congratulated on his successful management of the *Vorlegeblätter*.—*Academy*, Dec. 1.

DENMARK.

SÖNDERBY.—In June last, an interesting archæological discovery was made at Sønderby, on the west coast of Jutland. It consisted of about thirty urns of clay found in a moss at a depth of 3 feet. They occupied an area 4 ft. wide and 10 ft. long. Formerly there was a shallow lake here. Most of the vessels rested upon rough stones, but there was no trace of stone walls or roof; they varied from 2 to 8 inches in height. In most of them lay ashes and remnants of calcined bones, whilst the bottom was lined with reed-like kind of grass. Some of the urns had lids, but others appear to have been placed in the earth open: most of them were very simple in form, with smooth sides, but on some of the larger ones there were three knobs at the sides, and attempts at rough ornamentation. No metal or stone implement was found.—*Nature*, Sept. 6.

RUSSIA.

CHERSONESOS.—Professor Kondakow has found in the Chersonesos, where excavations are being carried on under his directions, about fifty models of terracotta, belonging to the third and fourth centuries B. C. Among them are some medallions with mythological groups representing Pan, Apollon, Dionysos, and several beautiful female heads.—*Bull. Arch. Dalmata*, 1888, No. 10, p. 20.

TURKEY.

CONSTANTINOPLE.—A correspondent writes: "An instance of the vandalism of the Turk and his disregard of antiquities reaches me from Constantinople from Dr. Long of the American College. The quay of the town of Bebek on the Bosphoros is in course of repair, and the Government are utilizing for this purpose large blocks of marble brought from various sites of ancient cities. On several of these blocks interesting inscriptions have been found, from which we gather that Iasos in Karia is one of the chief quarries from which they are brought. Two of these inscriptions, about to be built in, are of great interest. In one, the decree of proxeny is accompanied by citizenship, the months of Aphrodision and Adonion are alluded to, and amongst the names we have Hierokles, the son of Bryaxis, suggesting Bryaxis the Athenian statuary, to whose art the mausoleum of Halikarnassos, also in Karia, owed so much. On another inscription Artemis Astiadon is alluded to. It is a great pity that nothing can be done to check the Turkish Government from thus making use of material which will be for ever lost to history and archæology. The same has been done in the construction of a new pier near the site of the old town of Samos; inscriptions, reliefs, and bits of exquisite carving can now be seen, when the water is clear, built into the foundations. The old theatre at Thasos has been utilized for a similar purpose, and this work of destruction is perpetually going on."—*Athenæum*, Oct. 27.

GREAT BRITAIN.

COLLECTIONS OF EGYPTIAN ANTIQUITIES IN GREAT BRITAIN.—The forthcoming number of the *Recueil de Travaux relatif à la Philologie et à l'Archéologie Égyptiennes et Assyriennes* will contain the first of a series of articles by Miss Amelia B. Edwards on *The Private and Provincial Collections of Egyptian Antiquities in Great Britain*. Miss Edwards has twice—at the Orientalist Congresses of Leyden and Vienna—drawn the attention of Egyptologists to the importance of investigating and reporting upon the contents of local and private museums throughout Europe; and she is now herself beginning that task for Great Britain. This first paper treats of the Peel Park Collection, Manchester; of the Mayer Museum, Liverpool; and of the private collection of Mr. Jesse Haworth, of Bowdon, Cheshire.—*Academy*, Dec. 22.

ENGLAND.—BRIDG.—*Prehistoric boat*.—In some diggings made here for a gasometer, there was found a boat cut out of the trunk of a tree, undoubtedly belonging to prehistoric times. It is about fifteen meters long, by one and a half wide and one high. The prow is rounded; the poop cut in the shape of a horse's chest; there are holes that may have served

for oars, and a large one near the prow which seems to have been for the mast.—*Bull. Arch. Dalmata*, 1888, No. 10, p. 20.

DUMMER (Hants).—Early British Cemetery.—At a meeting (Nov. 21) of the British Archæol. Institute, Dr. J. Stevens read a paper on an early British cemetery which has recently been discovered and excavated at Dummer, Hants. The site is at Middle Down Field, 655 feet above sea-level, and close to an ancient track-way leading from Winchester to Silchester. The bodies have been burnt and the ashes arranged in rough hand-made urns, inverted over the remains. Fourteen or fifteen urns have been found at a distance of only a foot below the present level. There were no signs of any tumulus.—*Athenæum*, Dec. 8.

LONDON.—BRITISH MUSEUM.—Recent Acquisitions.—Among recent additions is a beautiful and interesting statue of Diana, more than life-size, in the archaistic style of the second century of the Empire. It is fully draped, in extremely regular drapery, but the soft and full limbs and face are far from the archaic models. There are remains of painting; a gilt crown is on the head: the right arm is wanting; the left hand holds a fan. The following enumeration of recent acquisitions is taken from the *Classical Review*. (1) *Vase of Mykenai ware*, of a new shape, resembling a flattened sphere, like an echinus, divided vertically in four by depressions, and ornamented with horizontal rows of wavy lines, and dots: from Knossos in Krete. (2) *Statuette in white marble* from Athens (0.23 m. high) of great interest as a Greek copy of the Doryphoros of Polykleitos, of proportions like those of the Naples statue, but with a head much nearer to the original: arms and legs are partly wanting. (3) *Bronze cylindrical cista* resting on three lion-paws: the lid is decorated with a handle formed of two wrestlers, male and female, and with two incised groups of animals, all within an olive wreath: on the body are two scenes; (a) Paris and Menelaos (*Iliad*, III. 346), (b) combat of Greeks against Trojans and Amazons. (4) *Large collection of antiquities from Naukratis* received from the Secretaries of the Egypt Exploration Fund, the proceeds of the second season's excavations on that site in 1885-6; including (a) bronze *kottabos*; (b) alabaster archaic male torso; (c) statuette of a draped hunter carrying a pair of dead hares, of limestone, with the dedicatory inscription to Aphrodite (?) by K[Α]ΛΛΙ[Δ]Σ; (d) a series of female and male figurines holding animals; (e) series of terracotta figures; (f) large series of fragments of painted pottery, including the geometric, Dipylon, native Naukratite, Kameirian, Corinthian, Polledraran, Kyrenean, Chalkidian and Athenian styles. The number of fragments with inscriptions, both incised and painted, is large, consisting principally of dedications to Aphrodite. There are also a number of signatures to vases, e. g., Nikosthenes, Ergotimos, Klitias, Sondros, etc. The association of the names of Klitias and Ergotimos, the

artists of the François vase, is especially interesting. (5) *Series of thirty-four vases from excavations in Kypros*, presented by Colonel Falkland Warren. (6) *Large red-figured krater with polychrome accessories*. (7) *Set of archaic vases of Boiotian style from Thebes* (cf. *Gazette Arch.*, 1888, Nos. 7-8, pl. 26).—*Classical Review*, July, October, November, 1888.

Among the recent acquisitions of the Department of Greek and Roman Antiquities is a large krater of the beginning of the second century B. C., painted with the subject of the infant Herakles strangling the serpents in the presence of several deities. Apollo appears in the centre of the composition, having, in the Isthmian fashion, his long locks in ringlets, a trait which localizes the work as due to the Theban school. On our left is a group of Zeus enthroned and addressed by Alkmene. In front of the design are Herakles and his half-brother: the former clutches his serpent by the throat, the latter jumps up to run away from his assailant. The white-haired nurse stoops over her charge as if to rescue the boys. Athene is near this group, and grasps the sacrificial dove by its wings, exactly as she does on the Harpy Tomb; probably this refers to the purification of Alkmene after child-bearing.

Chronological Rearrangement of Bronzes.—A considerable number of the antique bronzes from the First Bronze Room in the British Museum are being rearranged in chronological sequence, commencing with the earliest examples, which are mostly Etruscan. A beginning has already been made by placing in order the relics discovered in 1839 in the Polledrara Tomb, near Vulci, and acquired by the Museum in 1850, but never till now arranged in an instructive manner. They are in one of the projecting wall-cases.—*Athenæum*, Nov. 17.

Mr. Stanley Lane-Poole's catalogue of the additions made to the collection of Arabic coins since the publication of the eight volumes of his *Catalogue of Oriental Coins in the British Museum* is nearly through the press of Messrs. Gilbert and Rivington. The first part contains the descriptions of about 2,000 additions to the 3,000 coins catalogued in the original volumes I-IV, and includes a number of rare specimens, among them, those from the India Office Collection now in the British Museum.—*Athenæum*, Nov. 3.

OXFORD.—*Mr. Fortnum's Gift to the Ashmolean Museum*.—Mr. C. Drury E. Fortnum has made a free gift of the greater part of his magnificent collection to the Ashmolean Museum at Oxford, where it had already been deposited for some time on loan. This munificent act has placed at the disposal of the university for purposes of teaching and study many objects of almost priceless value in their relation to the history of art. The collection itself was formed with the distinct object of illustrating the whole course of civilized arts from the earliest times to the latest eddies of the Renaissance, and has thus a special educational utility.

Among the objects of classical interest contained in the collection, is the noble terracotta head, by some attributed to Skopas himself, and certainly belonging to his school. The series is especially rich in the Italian department, in which are two striking terracotta busts. One of them is a bearded head, which at Florence, at least, has been generally accepted as from the hand of Cellini; the other, by Pollajuolo, is the original of the well-known marble bust of Lorenzo de' Medici, the lower part of the face being evidently moulded from the head after death. The sculptures and reliefs, in various materials, include representative works of the schools of Orcagna, Mino da Fiesole, Benedetto da Majano, Rossellino, and others. Two reliefs—one in marble, the other in *pietra serena*—are ascribed to Desiderio da Settignano; and there is one of the terracotta originals of Pierino da Vinci's tragic group representing Ugolino in the *Torre del Fame*.

The series of majolica includes selected specimens, many of them signed works, from all the principal Italian fabrics, Hispano-Moresque, Rhodian and Persian wares, a fine Palissy plateau, and other interesting French pieces, and must be regarded as in the highest degree representative. Among the more important works of the class are a tabernacle and part of an altar-piece by Andrea della Robbia.

The bronzes begin with figures illustrative of Egyptian, Greek, Etruscan, and Graeco-Roman art; and include the important Aphrodite from Stratonikê in Karia. The Italian series is exceedingly rich, and supplies some noteworthy examples of the styles of Ghiberti, Cellini, Ammanati, Giovanni da Bologna, and others; while among the plaquettes, in which the collection is especially strong, is probably the finest existing group of the works of Moderno.—*Academy*, Dec. 1.

ST. ALBANS.—*Ruination-Restoration*.—In the course of a mordant article upon "Restoration and Ruination" the *Builder* of last week gives woodcuts: 1, an elevation of the new façade of the south transept of St. Albans' abbey-church; and, 2, the interior of the same, showing the manner in which it has been dealt with, at the expense and according to the taste and architectural skill of Lord Grimthorpe, to whom one of the most important buildings and valuable historical relics in England has been delivered as a prey. Whereas externally the façade shows five lancets grouped according to the mode of the Five Sisters at York, and having their heads ranged with the slopes of the gable, to the sides of which they nearly approach, internally the ceiling of the transept is flat(!) and on the level of the lower springing of the outer two lancets, and the apexes of the five lancets range parallel to the ceiling. Consequently, all that external portion of the grouped lights which is above the level of the ceiling is a sham.—*Athenæum*, Sept. 29.

WOOLWICH.—At a meeting (Dec. 6) of the British Archæol. Institute, Mr. F. C. J. Spurrell described a boat, or "dug-out," discovered in the excava-

tions for the Albert Dock at North Woolwich, whose form was peculiar, but the interest of which lay in the fact that a section of the soils above and below it—a thing rarely attended to—showed that it belonged to a period very slightly preceding, if not actually that of, the Roman arrival in Britain.—*Athenæum*, Dec. 15.

WALES.—**LLANTWIT-MAJOR** (near) (Glamorganshire).—*Roman Remains.*—On the suggestion of Mr. John Storrie, the Curator of the Cardiff Museum, excavations have been made during the last few weeks in a field locally known as Caermead, lying about a mile to the north-northwest of Llantwit-Major and about half a mile west of the road to Cowbridge.

It was clear from the moment the excavations were begun that the remains were Roman, for fragments of Romano-British pottery and brass coins of the third century were early brought to light. But no one expected to find so far to the south of the Via Julia the remains of a large and well-appointed Roman villa, showing indications of military occupation either here or in the near neighborhood. Yet the building whose foundations are now partly laid bare must have covered about two acres out of the eight which are enclosed and defended by a rampart. In all, the outlines of fifteen rooms have been traced, and of these three are sufficiently exposed to permit one to judge as to their use and style of mural decoration.

The largest lies on the north side and measures 60 ft. by 51 ft. Mr. Storrie believes it to have been used as a prætorium. In some parts the walls are about 9 ft. high—the highest yet met with—and still retain their original wall-plaster with decorations in blue, vermillion, and Pompeian red, these colors being as bright as when first laid on. Next to this room, and at its southeast angle, lies a small room about 12 ft. square, which appears to have been used as a workshop, if one may judge by the metallic fragments, clinkers, and bits of coal which strew the floor. Immediately to the south of this artificers' room is a large hall which has so far proved the chief point of interest, 39 ft. by 27 ft. in its full extent. It is divided into two compartments by a slight wall, pierced by a wide door-space, most likely covered by curtains easily removable when it was needful to throw the two compartments into one. The larger compartment is about twice the size of the other. The entire floor of the hall had been adorned with tessellated pavement, and enough remains to show its general design and quality; but in places it has been sadly mutilated.

In laying bare the pavement of this hall, no fewer than forty-one human skeletons of both sexes and all ages have been met with, and among them the bones of three horses. In one instance, a human skeleton lay beneath that of a horse in such a position as to indicate that the horse had crushed and killed the man by falling upon him. It is evident that this hall had been the scene of a massacre, for, in nearly every instance, the skull or

facial bones have been fractured, and the bodies lie over one another in confused heaps. In four instances there had been an attempt at burial. For this purpose the pavement was torn up and the body laid in an opening not more than six inches deep, its feet towards the east, and then surrounded with stones in the form of a coffin and covered with a few inches of earth. The unburied bodies belong to a small race with brachycephalic skulls; but those that are buried were clearly men of a larger size, and had skulls of the dolichocephalic type. It is reasonable to suppose that the former represent the natives of the district, and the latter the attacking party.

Nothing of value in the way of pottery has been met with, excepting a cinerary urn, which was found a few feet beneath the surface on the outer side of the north wall. There are still traces of a mound having been raised over it. This mound had been cut through and partly levelled at the time when the wall was built; but the urn with its contents remained undisturbed in its original position and beneath its stone covering. The other specimens of pottery are common black and grey ware, and, with the possible exception of a small piece of Samian, are all of Romano-British make. Only six or seven coins have been obtained thus far, and all but one of these are Roman Imperial brass, in rather poor condition, and represent the latter half of the third century, to which belong the great majority of Roman coins hitherto found in Glamorganshire.—*Athenæum*, Oct. 20.

AMERICA.

UNITED STATES.

NEW MEXICO.—*Ancient Pueblo Stone-Idols.*—The most important archaeological treasures ever found in New Mexico came into Santa Fe from the south, yesterday. For about two years, Hon. L. Bradford Prince has been carrying on quite extensive excavations among some of the oldest of the ruined cities in the territory, and with great success. A large number of the stone idols or household gods of which Espejo speaks as being so generally found in Pueblo towns in the time of his expedition (1582), but which were entirely destroyed after the Spanish occupation, have been unearthed, and constitute a unique collection of great value. Judge Prince has the only collection of these in existence, and has loaned seventy specimens to the Metropolitan Museum in New York. These idols are usually about a foot high, but a few have been found considerably larger, and reaching 20 to 22 inches. Some little time ago, in excavating among the mines of one of the ancient southern cities, was discovered an image far larger than any seen before, and on further exploration it was found that it was one of a set of three idols of unusual interest. The central figure is no less

than 38½ inches in height, with a squareish head 8 inches wide, round eyes and nostrils, and a long mouth. On top of the head are protuberances which may represent ears, but are very possibly intended for horns. The arms are carved in relief, the right arm being bent toward the front and the left one hanging directly down: both end in hands with four distinct fingers. The legs are represented bent, as is usual in the larger Pueblo idols. The second figure of the three is that of a woman, very tall and slight (34 inches high) and with the hands clasped in front. The third idol is more massive, being 28 inches high by something over eight wide. The right forearm is bent upward, with the fingers on the lower lip, and the left arm slants to the front and downward. These constitute the largest and most important group ever discovered. While Judge Prince did not mention the exact locality of the mines, they are understood to be in the vicinity of Abo, in Valencia county.—*Santa Fe Herald*, Oct. 1.

WASHINGTON.—*National Museum*.—Mr. W. W. ROCKHILL, Secretary of the American Legation at Peking, has recently deposited in the National Museum a number of very fine and extremely rare objects relating principally to the religious worship of the Lamas. These objects include a libation-bowl made of a human skull; a flute made of a thigh bone; a Lamaist rosary, consisting of 108 beads; a prayer wheel; jeweled Buddhist idols; Mongol and Thibetan books; a Lama hymn-book showing a peculiar musical notation; pictures; coins; *etc.* This is probably the first collection brought to the United States from Thibet, and it furnishes much material valuable for study.

The National Museum has recently acquired a collection of curios from the Kassai River, the largest southern affluent of the Congo. These objects were collected in 1885 by Lieut. E. H. Taunt, U. S. N. They include short swords which show excellent workmanship, bows and arrows, specimens of the currency of the country (copper), carved drinking-horns, wooden cups, pipes, embroidered and dyed grass-cloths.—*Communicated by Dr. Cyrus Adler.*

CENTRAL AMERICA.

GUATEMALA.—*Ancient Sculpture from the Pacific Slope*.—The California Academy of Sciences publishes (vol. II, No. 2) a memoir by Dr. GUSTAV EISEN on his researches among the archaeological remains in Guatemala. He found at El Portal, Santa Rita, Pantaleon, Los Tarros, Santa Lucia Cotzumalguapa, and Aguna (as well as in many other places along the Pacific Coast) so numerous traces of ancient monuments that there is scarcely a farm upon which ruins or relics are not found. The monuments on this coast are of a type entirely different from those of Guirigua and Copan: they consist of (1) large and small mounds, about twenty feet high,

made of soil or of soil and stones; generally, three or four mounds being grouped to form an inclosure: some mounds are several thousand feet in length, others only fifty or sixty ft. (2) Smaller mounds with a low foundation of rough stone without mortar. (3) Bridges and aqueducts of cut stones, laid without mortar, in perfect preservation. Such are found at Santa Lucia and Los Tarros. (4) Stones sculptured with animal or human heads of varied skill: at Los Tarros of beautiful make and design; at Aguna, very primitive. (5) Richly ornamented hollow stones or fonts, used either for baptism or for sacrifice. (6) Sculptures, in low relief, of mythologic or historic representations. (7) Pottery of different kinds and epochs, such as dishes, vases, musical instruments with human and animal heads. The finest pottery is found on or near the surface, the inferior kinds, about nine feet down.

The sculptured stone-heads, found along the coast, all have a large conical projection, evidently formed for insertion into the walls of the temples.

Dr. Eisen describes the objects found, and illustrates them in 33 figures of artotype plates.

UNITED STATES OF COLOMBIA.

SANTIAGO.—At the fifty-second meeting of the Amer. Institute of Mining Engineers, held at Buffalo, N. Y., Secretary Raymond read a paper on a Gold Breastplate which was recently dug up by miners at the Great Remance quartz mines, fifteen miles from the city of Santiago, United States of Colombia, Isthmus of Panama. He judged it to be at least 400 years old; for, after the invasion of Cortez, the natives were not allowed to be buried with any examples of their famous art of gold-making. These breastplates are now exceedingly rare, from the fact that the Spanish invaders were great friends of the melting-pot. This plate is of twenty-three karat gold and weighs 110 pennyweights. It is of curious design and skilful workmanship. It represents a bat with outstretched wings. The body is the head and neck of a deer, while the antlers are in the form of alligators. It was undoubtedly a totem, or coat of arms, representing the elements air, water and earth. The wings of the bat are of beaten gold welded to the head in a masterly way. The body was cast hollow, and the casting shows a higher degree of workmanship than the hammered work.—*Engineering and Mining Journal*.

A. L. FROTHINGHAM, Jr.

SUMMARIES OF PERIODICALS.

ΕΦΗΜΕΡΙΞ ΑΡΧΑΙΟΛΟΓΙΚΗ. JOURNAL OF THE ARCHÆOLOGICAL SOCIETY IN ATHENS. 1887. No. 4.—CHR. TSOUNTAS, *Antiquities from Mykenai* (plates 10, 11, 12, 13). The objects here published were discovered in the excavations of 1886. Three inscriptions are given. The first, in archaic characters on a fragment of a jar, reads Περυλος: the form of λ is λ. The second is an honorary decree of the villagers of Mykenai: the date is immediately after the tyranny of Nabis. The third is a fragment of a decree concerning the use of some money given to the village of Mykenai: this inscription is later than the preceding. In both, the demotic Δα(ι)φορτεὺς occurs, which seems to show that at Mykenai there was a tribe Δαιφορτίς. These inscriptions show conclusively that Mykenai was inhabited at the time of Nabis, and the testimony of vases shows that it was inhabited in the third century B. C., though the settlement was probably given up after two or three centuries. Pl. 10 gives two plaques. The first shows parts of three figures in yellow, red, and black upon a greenish-gray ground: the figures have asses' heads, but stand upright and carry a pole on their shoulders. The second plaque has a light blue ground: in the centre is a figure covered by a shield; to the left is an altar; at each side of the picture is a female figure with outstretched arms: the figures are yellow; the edges of the plaque are decorated with bands of red and blue upon a white ground. Pl. 11 gives eight fragments of wall-paintings. The colors are red, black, gray, and yellow, but seem to have suffered from fire. The objects represented are armed men and horses: one fragment seems to represent the head of a boar. All the figures are very fragmentary. The equipment of the men is similar to that on the large Mykenaian vase, Schliemann, *Mycenæ*, 213, 214. This scant costume seems, however, not to have been customary at Mykenai, where the full Homeric garb was the rule. Pl. 12 gives fragments of wall-paintings consisting of bands of brown, red, white, and a dark bluish-gray adorned with wave-patterns and other linear ornaments. Pl. 13 gives a wing carved in ivory, an upright winged sphinx (found upon the Akropolis at Athens), and 27 utensils and ornaments of gold, bronze, stone, glass, and bone, similar to those previously found at Mykenai, Menidi and Spata.—D. PHILLOS, *Inscriptions from Eleusis* (contin.). No. 35 is part of a decree in honor of the ἐπιμεληταὶ τῶν μυστηρίων chosen in the year of the archonship of Polyektos (277/6 B. C.). The date given is ἐπὶ Ἱέρωνος ἀρχοντος. Hieron was, then, probably archon in

276/5 B. C. King Antigonos (Gonatas) is mentioned. The day of the decree is Ποσιδεώνος ὑστέρον τρίτη ἐπὶ δέκα, δευτέρα καὶ τριακοστὴ τῆς Πρυτανείας. The year appears to be an ἐμβόλιμον ἔτος. No. 36 (facsimile) is a long fragment of a decree in honor of Thrasykles and Niketes, ἐπιμελεται τῶν μυστηρίων chosen in the archonship of Diokles, probably the Diokles mentioned in the decree in honor of Demainetos (Εφ. Ἀρχ., 1887, p. 3 f.) and in the list of Archons *C. I. A.*, II, 859. His date is 214–209 B. C. The thirteenth prytany is mentioned, which shows that there were at this time thirteen tribes at Athens, and the number of senators is given as 650. The thirteenth tribe was the Ptolemais (added between 229 and 221 B. C.), which occupied the seventh place in the sequence of tribes until, upon the removal of the Antigonis and Demetrias (and the addition of the Attalis), it received the fifth place. The number of 650 senators is hitherto unknown, and results from the number (13×50) of tribes. When under Hadrian a thirteenth tribe was again added, the number of senators did not rise to 650, but had fallen back to the earlier number, 500. In this inscription, Ἰαόκχου (perhaps for Ἰοάκχου) is a new form of Ἰάκχου. No. 37 is a fragment of a decree in honor of Dion, secretary of the Ταμίης τῶν Σιτωνικῶν in the year of the archon Menekles (Ol. 124.2 or 3). Dion had held this office before, and also that of secretary τοῖς ἐπὶ τῇ Διοικήσει. No. 38 is a fragmentary decree of Macedonian times in honor of Euthydemos.—ST. A. KOUMANOUDES, *Inscription from Priene*. The latter part of an honorary decree from Priene is published: the lines are fragmentary; the date assigned is "Roman times." A second inscription, also from Priene, consists of five names.—G. NIKOLAÏDES, *On a Boiotian Skyphos published by S. Koumanoudes*. The figures on this vase (Εφ. Ἀρχ., 1887, pl. 5.2; cf. JOURNAL, 1888, p. 390) are explained as Agamemnon, Menelaos, Odysseus, Aias and Hektor, and the scenes as those of *Il.*, A. 273 ff.—H. G. LOLLING, *Contributions to the Topography of Megaris* (supplementary pl.; 3 cuts). The topographic parts of Pausanias' work are generally correct, and the study of Megarian topography confirms this opinion. The path of Pausanias from Megara to Corinth did not follow the line of the present railway or that of Hadrian's road, but was more direct. The direct path is now called Τουρκοδόρμι. Remains of buildings are found along this path, which are identified with buildings mentioned by Pausanias. These are: the tomb of Kar, the tomb of Telephanes, the temple of Zeus Aphesios. This last was an offshoot of the sanctuary of Zeus Panhellenios in Aigina. Remains of a nekropolis are noted, and traces of an ancient village, probably Ἀλυκος.—ST. A. KOUMANOUDES, *Fragments of Attic Decrees*. Four short fragments of inscriptions from Athens are published: one of these is in Latin.

HAROLD N. FOWLER.

GAZETTE ARCHÉOLOGIQUE. 1888. Nos. 1-2.—E. REVILLOUT, *On a supposed Hittite seal found near Tarsos* (pp. 1-5; pl. 1). The Hittomania of certain writers is exposed, especially as exhibited in Mr. Tyler's paper in the *Babylonian Record*, in which common Phœnician adaptations from Egyptian mythology—the god Horus offering a libation, and the goddess Thoueris with her *sa*—are confidently brought forward as Hittite.—Baron J. DE BAYE, *Lombard Crosses found in Italy* (pp. 6-20; pls. 2, 3). Excavations made of late years in the valley of the Po have brought to light a number of barbaric crosses of thin gold plates stamped with ornamental and figured decoration: the writer enumerates some fifty of these, and illustrates the most important. They were all destined to be sewed to the apparel, though it is not apparent whether they were a mark of some dignity or office, or a religious emblem. Crosses of a similar description have been found in Germany. The earlier crosses, dating perhaps from the VI cent., have a merely geometric decoration which undergoes a gradual development, and finally there appears a class in which the human figure appears: the crosses have usually four arms of equal length, and in style are uniformly barbarous.—EUG. MÜNTZ, *Inedited frescos of the XIV century in the Chartreuse of Villeneuve (Gard)* (pp. 21-4; pls. 4, 5). This paper is the last of the series, and describes the paintings on the left wall which represent the last scenes in the career of John the Baptist, and those in the polygonal apse, most of which have disappeared. The latter are, the 12 Apostles; the Crucifixion; the donor, Pope Innocent VI, kneeling before the Virgin and Child. The origin of all the frescos of the chapel at Villeneuve is undoubtedly Italian, but by the side of the direction exercised by the Italian painters we must admit the collaboration of French artists.—H. BAZIN, *Hypnos, the god of Sleep; his representations in the museums and collections of the Southeast* (pp. 25-7; pl. 6). Three bronze statuettes of Hypnos are published, the first from the museum of Lyon, the second found at Ossy (Ain) and now in Lyon, the third found at Neuville-sur-Ain and also in the Museum at Lyon. Only three other representations of Hypnos exist in France. None of those published is complete: all have the arms fractured: all are represented in the act of running, and evidently go back to a single Attic prototype.—M. K. THÉOXENOU, *The recent excavations on the Akropolis at Athens* (pp. 28-48; pls. 7, 8). This is the first of a series of papers in which all the early sculptures lately found on the Akropolis are divided into groups and carefully described. The writer begins by showing how few were the archaic works previously known. The half-dozen mentioned by Beulé, and the single pieces published by Conze (1864), Lenormant (1876 *etc.*), Rayet (1877), Furtwängler (1875-1883), Milchhöfer (1879), Von Sybel (1880), and Lange (1880). Then commenced the excavations undertaken by the Greeks themselves. Stamatakis worked

from 1883 to 1885, and 26 of the archaic fragments found by him were published in 1883 by Mylonas; others by Philios. But the great discoveries commenced early in 1886 after Kabbadias had succeeded Stamatakis, when the statues discovered near the Propylæa astonished the world. Since then each month has produced some discovery, and a great part have already been published. Among others there have been found bases of statues bearing the names of some famous sculptors of the archaic period—Antenor of Athens, Archermos of Chios, Theodoros of Samos. M. Theoxenou first studies the sculptures in the round executed in stone or marble (exclusive of bronzes), and divides them into two classes: (a) the male type; (b) the female type. In type a, the seated figures represent religious dignitaries or scribes; there are a number of equestrian statues which are nearly all nude, as is also the case with most of the standing statues, except in the figures that may represent divinities. There are four seated female statues known, of which the best-preserved represents Athena, with an immense aegis—perhaps by Endoios—and of the free archaic style. There is also a special class of archaic Victories or Nike. The most numerous class of all, beyond comparison, is that of the standing female statues, so well known and frequently described that it would be superfluous to summarize the description here given. In this first paper, he confines himself almost entirely to the well-known Athena.

Nos. 3-4.—A. MAURY, *The bronze situlas of the museums of Este and Bologna* (pp. 49-64; pl. 12). A district of Venetia in Italy has long gone by the name "Euganean," and, of late years, attention has been called to the people which inhabited this region before the Roman conquest, by excavations which have brought to light many series of interesting antiquities, the most important of which are the bronze figured vessels called *situlae*, which form the main subject of the present paper. The writer concludes that "the qualification of 'Euganean' antiquities does not correspond to the origin which must be attributed to the nekropolis of Este, which presents, in our opinion, the vestiges of a population far more extensive than the nation whose name has been attached to the country surrounding Ateste. This population must have included an assemblage of tribes which had already felt the influence of the Graeco-Oriental civilization when the Etruscans came to settle in their territory." This conclusion is borne out by the style of the figures, animals and decorative details on these monuments, and by the subjects portrayed, which are mostly descriptive of the life of a single and primitive people, in which "we recognize the influence which the early Greek civilization, perhaps Pelasgic, had exercised on the primitive population of Italy, and which was felt as well in Etruria as in Latium." The fabulous monsters on these early bronzes are clearly Phœnician in style. A comparison is drawn between them and some works found in the earliest

tombs at Agylla=Caere, and the conclusion is reached that bonds existed between the so-called "Veneto-Etruscans" and Keltic tribes established to the north and the Etruscans to the southwest, from whom they were cut off by the Gallic invasions.—CH. YRIARTE, *Maestro Ercole da Pesaro, jeweller and engraver of swords in the xv century* (pp. 65-78; pls. 14, 15). The writer has made an exhaustive study of Caesar Borgia, and was led to write a monograph on his famous sword, so beautiful as to be called the *Queen of swords*. It is engraved on every part—handle, pommel, blade—with delicate compositions whose subjects, of an historico-allegorical nature, were evidently dictated to the artist by the Duke himself. The artist signed his name thus: OPVS HERC. Its scabbard of repoussé leather, by the same hand, is in the South Kensington, while the sword is owned in Rome by the duke of Sermoneta. This work is taken by the writer as his starting point in researches concerning the person, career, artistic style and works of Maestro Ercole da Pesaro, the artist who worked at Mantova for the Gonzagas, at Ferrara for the Estes, and especially at Rome for Alexander VI and his family the Borgias. Ercole's style is borrowed from Pinturicchio, though he is also a precursor of the affected and long-figured style of the *Décadents*. By certain characteristic features, the writer is able to identify, for the first time, as works of this master, a large number of swords in the museums, private collections and antiquarians' shops of Europe.—A. PODSCHIWAŁOW, *The bronze handle of an amphora with the figure of Medusa* (pp. 79-81; pl. 13). This work was found in a tumulus or "kourgane," in the district of Elisavetgrad, government of Kherson, Russia, and is now in the Hermitage at St. Petersburg. In the same "kourgane" were found, beside the vase to which it belonged, a copper bowl, two iron lance-heads, three bronze arrow-heads, five bronze rings, and a terracotta amphora. The handle, which is of high finish and beautiful decoration, has a figure of Medusa, with four wings, running side-ways, though her bust is given in front view. The style is developed archaic of the VI cent., and the masterly treatment of the anatomy of the lower limbs, especially the feet, is remarkable. The finding of a work of pure early-Greek art in this region is interesting, as the other objects found in the tumulus indicate it to be Scythian.—M. K. THÉOXENOU, *The recent excavations on the Akropolis at Athens* (pp. 82-8; pls. 9, 10, 11) (contin.). In this paper a study is made of the interesting question of the polychromy of these archaic sculptures, as illustrated by a few typical examples. A description is then given of the two *xoana* found on the Akropolis, of the material out of which all the sculptures were carved, and of their style and details of costume.

Nos. 5-6.—M. K. THÉOXENOU, *The recent excavations on the Akropolis at Athens* (pp. 89-102; pls. 7, 8, 9, 10, 11, 16) (contin. and end). This last paper begins with a description of the headdress, which is extremely com-

plicated and varied, and of the ornaments, such as earrings, bracelets and necklaces: the series of sculptures in the round is finished by the description of two archaic marble polychrome sphinxes, found in 1883. The study is completed by a review of early Attic relief-sculpture, of which the most important pieces are the poros gable-sculptures of the Herakles series; and, finally, by a discussion of the personality and use of the female statues.—H. BOUCHOT, *Charles VIII and Anne de Bretagne* (pp. 103-8; pl. 17). Two portraits, those of Charles VIII and Anne de Bretagne, in a ms. of Bibliothèque Nationale at Paris, are published. The ms. is a prayer book, 1190 of the *Fonds Latin*, or No. 292 of the mss. exhibited in the Galerie Mazarine. Hidden within a panel on each side of the binding were two well-preserved portraits of the xv-cent. style. Two tracings by M. de Bastard indicated to the writer that these portraits, heretofore anonymous, were valuable portraits of King Charles VIII and Anne de Bretagne, painted in a most naturalistic fashion and making the king as disagreeably ugly as he really was: "they are of the highest political importance, worthy of being placed near to the Charles VII of Fouquet, and to be compared to the portraits of Francis I in the Louvre. As purely artistic documents, they fill the void extending from Louis XI to Francis I in the works of painting in France.—F. DE MÉLY, *The so-called crozier of Ragenfroid* (pp. 109-23; pl. 18). This crozier is one of the pieces of enamelled work that have called forth most discussion, especially in connection with the origin of Limoges work. Until now, only an imperfect drawing by Willemin had been published. It was said to have been found, in 1793, in the tomb of Ragenfroid, bishop of Chartres from 941 to 955, in the church of Saint-Père-en-Vallée. De Lasteyrie believes it to be of the x cent.; Labarte, Franks, Pottier, of the xi; others, of the xii cent. The subjects are from the Life of David. It is signed: *Frater Willelmus me fecit*. The enamel is *champlevé*. Lasteyrie (x cent.) and Molinier (xii cent.) attribute it to the school of Limoges; Labarte, to the Rhenish school. An examination of the color, technique and style show that Labarte is nearer correct. A careful comparison of the costume places the crozier between 1090 and 1140, and as probably a Norman work.—H. DEGLANE, *The Palace of the Caesars, on the Palatine* (pp. 124-30; pls. 21, 22, 23). This is a study of the Palace of the Caesars, especially in the central part of the hill, with a view to a partial restoration. It begins with the buildings on the site anterior to Augustus: the Porta Mugonia, the temple of Jupiter Stator; then the houses of Livia and of Germanicus and the temple of Jupiter Victor.—CH. YRIARTE, *Maestro Ercole da Pesaro, jeweller and engraver of swords in the xv century* (pp. 131-42; pls. 19, 20) (end). A careful study is made of the particulars by which this artist stamped his works—mainly the repetition of certain motives, like the Borgia Bull, the pyramid of Cestius, the tower of Pisa, etc. Another

subject is entered upon in the question of the drawings of Maestro Ercole, in which the conclusions are more hypothetical, as none of them are signed. This collection of original drawings is in an album in the *kupferstich-cabinet* at Berlin, and their authorship by Ercole da Pesaro, to which M. Courajod called M. Yriarte's attention, was confirmed by Dr. Bode of Berlin. They are 10 or 12 in number, and some of them appear to be sketches for the compositions on the swords. Then follow some letters of the famous patroness of art, Isabella d'Este, concerning a *Hercules aurifex*, attached to the Duke of Ferrara, who can be none other than our master.—PH. BERGER, *A Persian cylinder with an Aramaean inscription*. The design is of two sphinxes with men's heads, affronted, and the inscription is read, doubtfully: "Seal of Mitras, son of Saïli."

A. L. F., JR.

JAHRBUCH D. K. DEUT. ARCHÄOLOGISCHEN INSTITUTS. Vol. III. 1888. No. 3.—G. TREU, *Arrangement of the western pediment of the Temple of Zeus at Olympia* (pls. 5, 6; six cuts). The groups at the ends of the pediment are left, as in the arrangement first proposed by Treu and now generally accepted. The head of the Lapith *c* is, however, brought close to the Centaur *D*. In the middle of the pediment, the groups next to the Apollo (*HIK* and *MNO*) as well as the groups next to these (*FG* and *PQ*) are interchanged. The change in the case of *FG* and *PQ* is supported by the forms of the groups since the addition of fragments not at first recognized as belonging to these groups. It is evident that the old arrangement puts the groups in opposition to the slope of the pediment: *HIK* and *MNO* are interchanged in order to bring the two tallest figures, *H* and *O*, next the Apollo. The height of the figures now decreases regularly from the Apollo in the centre to the recumbent nymphs in the corners. That the new arrangement assumes more confusion in Pausanias' description than the old one, is unimportant, for some confusion there certainly is. With their positions, the figures affected by the new arrangement also interchange names. It has been known all along that three figures in the western pediment (*A*, *B* and *V*) are of Pentelic marble, instead of Parian like the rest. But the cushion under *V* is of Parian marble, and one arm of *V* is Pentelic. The parts made of Pentelic marble evidently belong to a later period than the rest. There was undoubtedly a restoration of this pediment in ancient times, apparently under the Romans. The restoration was made necessary by the falling of a part of the cornice, which dragged with it three figures (*A*, *B* and *V*) and injured another (*V*).—G. LOESCHKE, *Relief from Messene* (pl. 7; one cut). A relief—published as a vignette at the end of Stackelberg's *Gräber der Hellenen*, also *Expéd. de Morée*, I, pl. 35, Clarac, *Mus. de Sculpt.*, II, pl. 151^{bis}—is here carefully reproduced. Stackelberg's drawing is also republished. The relief is now in the Louvre: it was found by

Stackelberg near the Stadion at Messene. The relief is on the side of a slightly curved block 1.205 met. broad and 0.595 m. high. A nude young man with a lion-skin thrown over his left arm stands with raised axe before a lion: beneath the lion's paws is a dog, and a second dog stands before him: from behind the lion comes a horseman in Macedonian costume to the succour of the man on foot. A group at Delphoi representing a lion-hunt in which Krateros came to the aid of Alexander is described by Plutarch (*Alex.* 40): it was a work of Leochares and Lysippos. Perhaps this relief is the work of some pupil of Leochares, and it may have adorned the pedestal of a statue of Alexander.—A. FURTWÄNGLER, *Studies on Gems with Artists' Inscriptions*. II. *Gems with Artists' Inscriptions in various Collections* (pl. 8; 12 inscriptions in facsimile). 29 gems are published and several others are discussed. The artists are classified chronologically. 1. *Artists before Alexander*: Semon (no works of the famous Mnesarchos and Theodoros of Samos are known), Aristoteiches, Syries, Phrygillos, Athenades, Pergamos, Dexamenos of Chios, Olympios, Onatas (?). 2. *Artists from Alexander to Augustus*: Lykomedes, Philon, Herakleidas, Pheidias, Nikandros, Agathopous, Onesas, Sosos, Athenion, Boethos, Protarchos, of whom the last three have left only cameos. 3. *Artists of the Augustan period and the early empire*: Dioskourides, six of whose works are discussed.—A. MICHAELIS, *The Reliefs with the Peliades, again*. Otto Kern (see JOURNAL, p. 248) thinks that the Lateran relief was known in the last century. The drawings upon which this opinion is based do not represent the Lateran relief, but another very similar one. The Berlin relief, which can be traced back beyond the year 1550, is not a copy of the Lateran relief, nor the original of the drawings, but is a third antique repetition of the same original. The branch in the hand of one of the Peliades was originally a sword.—F. VON DUHN, *Farewell scene upon a Campanian Hydria in Karlsruhe* (cut). A youth with chlamys and staff is bidding farewell to a draped female. The stern of a ship in which the youth is to embark is close by. The ἀφλαστον has five divisions: ταυρία flutters from the στῆλῃς: at the top of the στῆλῃς is a cross-piece with the inscription Ζεὺς Σωτήρ. This cannot be the name of the vessel, but takes the place of a figure of Zeus. The vase was found in a grave near S. Maria di Capua. It can hardly be older than the end of the fourth century B. C. See Winnefeld, *Beschreibung d. Vasensamml. d. großh. verein. Samml.*, Karlsruhe, 1887, No. 350.—O. KERN, *The Pharmakeytirai on the Chest of Kypselos*. This scene is explained as a representation influenced by the Orphic Theogony. The two women with pestles and a mortar are Εἰδὴ τ' ἐνείδης καὶ ὁμόσπορος Ἀδράστεια (*fr.* 109. 110 *Abel*).—A. MICHAELIS, *Demosthenes Epibomios* (2 cuts). A relief in Trinity College, Dublin, is published. Ficoroni says the relief was found in 1737. Since the auction of the Mead collection in 1755, its fate has been unknown until

1887. A cast of it was seen in Rome by Winckelmann, who thought the original was a terracotta. The relief is of marble, and bears the inscription *Δημοσθένης ἐπιβώμιος*. It represents a bearded man sitting on an altar. The general style makes it probable that the work is a forgery, and this belief is further strengthened by noticing the fact that the artist did not know the form of the Greek himation. Strange to say, the face does not resemble the relief of Tarragona, which passed for a genuine likeness of Demosthenes in the early part of the last century, and does resemble the real likeness of Demosthenes, which was not known until 1753.—**REPORTS.** *Acquisitions of the British Museum in the year 1887.* Extract from A. S. Murray's report to Parliament.—*Acquisitions of the Royal Museums at Berlin in the year 1887.* I. O. Puchstein, *Collection of Graeco-Roman sculptures and casts*. Two originals and forty-two casts are reported. II. A. Furtwängler, *The Antiquarium* (11 cuts). 1. *Collective discoveries and series*: 1. *Bucchero-vases*, small terracotta altars with reliefs, objects of metal, Egyptian porcelain, etc., vases and lamps mostly from the old necropolis on the Esquiline. 2. *Antiquities from the sanctuary at Dali in Kypros*: these are terracottas and fragments of statues. 3. *Antiquities from the nekropolis of Polis-tis-Chrysokou in Kypros*: these are metal and stone ornaments, bronzes, terracottas, vases, and a few sculptures in sandstone. 4. *Collection of vases and bronze utensils*: these are "geometrical," "Dipylon," "proto-Corinthian," and other early vases; the bronzes also are of early date. II. *Separate acquisitions*. A. *Engraved Stones*: seven gems are described, of which five are part of a series bought at the sale of the De Montigny collection in Paris. B. *Bronzes*: one archaic "Apollo" statuette, two fibulae, three vases, two repoussé reliefs, one representing Aphrodite *ἐπιτραγία*, the other Dionysos and Papposilenos. C. *Vases*: ten vases and some fragments; most of the decoration of early style. D. *Terracottas*: 28 figures and groups are described. E. *Miscellaneous*: (1) a sling-bullet; (2) a round bronze medal; (3) two necklace-beads of stone.—**BIBLIOGRAPHY.**

HAROLD N. FOWLER.

MITTHEILUNGEN D. K. DEUT. ARCHÄOLOGISCHEN INSTITUTS. ATHENISCHE ABTHEILUNG. Vol. XIII. No. 2.—F. WINTER, *the Moschophoros and its position in the History of Art* (5 cuts). In the summer of 1887, a block of poros stone was found among the ancient foundations near the Akropolis museum. The stone bears the inscription *Κ]όμβος ἀνέθηκεν ὁ Πάλου*. A figure of bluish-gray marble was formerly set in its upper surface. Of this, only the plinth and part of the right foot remain; but it is enough to show that the figure was male; and, as dimensions and material correspond to those of the moschophoros found on the same spot in 1862, there is no doubt that the base and inscription belong to that fig-

ure. The letters are Attic of the first half of the sixth century B. C.: the marble is Hymettian. The style of this figure and of other Attic works of the same date and material is (like that of so many Kyprian figures) adapted to a soft material which can be cut rather than chiselled; such material is the Attic poros stone, in which the earliest Attic sculptures were executed. A better technique for work in marble was introduced in the second half of the sixth century by the Nesiotic artists, who brought with them from Chios great technical dexterity, fineness of detail, and beauty of ornament, and introduced the use of Parian (or Chian) marble. Attic art was for a time entirely under Chian influence, and owes much of its later excellence to the methods learned from this early and short-lived school. The correctness of the views stated is illustrated by examples.—TH. GOMPERZ, *The Decree relating to the Settlement of Salamis*. This decree (*Mithth. Ath.*, ix, p. 117; *C. I. A.*, iv, p. 57, 1a; *Bull. Corr. Hell.*, xii, 1) is published with emendations and remarks.—J. SIX, *The Artists' Inscription of Mikkiades and Archermos* (facsimile). The reading of this inscription proposed is: Μικκιά[δης τόδ' ἄγαλ]μα καλὸ[ν πετεεινὸν ἐτευξεν] Ἀρχέρμουν σο[φ]ί[η]σιν Ἐκηβό[λου αὐτ' ἀνέθηκεν] οἱ Χῖοι, Με[λαν]ος πατρώιον ἄσ[τυ] νέμοντες. The most probable date for this work is about 602–599 B. C. The Chians engaged in a successful war against Alyattes, which ended in a peace made in 600 B. C. It was, perhaps, in memory of this war that the Chians dedicated the Nike. Archermos is the first who represented Nike flying. He was also the inventor of the "kneeling posture," which represents the act of leaping, not of running. The verses of the "Shield of Herakles" (217, 218, 223), which refer to such a representation, are not older than the date here assigned to Archermos. The source of the scholion concerning Archermos seems to be Ion, who may also be the ultimate source of Pliny's information.—F. STUDNICZKA, *From Chios* (pls. III, IV; 22 cuts). This is a report of a nine-days' stay in Chios. The writer examined in person only the southern part of the island, including the so-called "school of Homer." The Kybele-relief from this place is published. Forty-four inscriptions are published, of which fifteen are new. The inscriptions are for the most part fragments of decrees, honorary and sepulchral inscriptions. Three stamped inscriptions on tiles are given in facsimile. A few unimportant remains of early art are mentioned; the numerous somewhat rude cut-stones (intaglios) offered for sale on the island are described as forgeries; a μνῆ of lead with the Chian arms (sphinx and amphora) is published. Sculptures in stone are: (1) a head of Aphrodite; (2) an Apollo-hermes with inscription; (3, 4) male heads; (5–8) reliefs, the most attractive of which shows a female figure in a chariot—beside her was once another figure; (9–12) so-called "feasts of the dead"; (13–17) gravestones. Three of these are adorned with ordinary sepulchral reliefs, but the ornamentation of the other two

is executed, not in relief, but in incised lines like the work upon Greek and Etruscan mirrors. No. 16 is adorned on three sides, and shows traces of adornment on the fourth. On the front is represented the deceased woman seated in a chair and playing the harp. Before her stands a handmaid with a bowl. On each of the other two sides is a siren, of whom one is playing the harp, the other the double pipe. The representation on all three sides is surrounded by a wave-pattern. The inscription may be completed to Λάμπρον. No. 17 bears the inscription Μητρόδωρος Θεογέιτορος in letters of the first half of the third century B. C. The stone was probably ornamented on all four sides, but only one side was accessible. At the top is a leaf-pattern, below this, four winged sirens, and, below these, a battle of Centaurs and Lapiths. Under this is the inscription, which occupies the upper part of a large blank space flanked by a linear pattern. Below the blank space are two bigae with winged drivers.—A. CONZE, *Hermes-Kadmilos* (pl. v; 3 cuts). Three reliefs are published which represent Kybele accompanied by a lion and a male figure. That the male figure in these and similar groups is Hermes-Kadmilos is made doubly probable by a terracotta of the British Museum (pl. v) in which the figure bears a clearly recognizable *kerykeion*.—H. SCHLIEMANN, *Attic Sepulchral Inscriptions*. Near Dr. Schliemann's house in the ὁδὸς Μουσῶν at Athens, remains of an ancient cemetery were found. Ten simple inscriptions are published. The dates assigned are from the fourth century B. C. to the beginning of our era. The persons buried here seem to have been poor and for the most part foreigners. An Apollo-head, of Parian marble and fair workmanship, was found at the same place.—W. DÖRPFELD, *The Eridanos* (pl. vi). Through the city of Athens flows a small stream: it is covered within the city, but appears as a brook near the Hagia Triada. In Hellenic times, this stream was uncovered: it rose at the foot of Lykabettos, flowed through the city, and emptied into the Ilissos near where it is now crossed by the road leading to Peiraieus. In early times, the water must have been drinkable, but later the stream was probably little better than a running sewer. That this is the Eridanos, is shown by passages in Plato (*Krit.*, 112^a), Strabo (ix, p. 397), and Pausanias (i. 19.6).—C. SCHUCHHARDT, *Paralia*. A relief in Peiraieus (published by Robert, *Mith. Ath.*, vii, pl. xiv) represents Dionysos (with inscription) and a female figure. This last has an inscription which Robert read Παῖδα. This is now read Παράλια. The relief is votive, dedicated by the district Παράλια: the female figure personifies the district.—MISCELLANIES, LITERATURE, DISCOVERIES. Recent excavations are described [W. D. and P. W.]. The three recently discovered fragments of inscriptions relating to the building of the Erechtheion are published [P. W.]. A cut is given showing the position of Dr. Schliemann's house in the ὁδὸς Μουσῶν. The cemetery at this place must have

been outside of the ancient city. Therefore the city did not extend so far toward the East at this point as has been supposed [W. D.].

HAROLD N. FOWLER.

REVUE ARCHÉOLOGIQUE. 1888. March-April.—A. HÉRON DE VILLEFOSSE, *White-clay figurine found at Coudebecq-les-Elbeuf* (pl. vi). Similar figurines have been found in the province of the Auvergne, Touraine, Anjou, Vendée, Bretagne and Normandie. This represents the Gallic Venus or nature-goddess, and bears the inscription RIIXTVGIIIN-OSSVLLIASAVVOT, which H. de V. reads *Rextugenus fecit*.—CLERMONT-GANNEAU, *Sarcophagus from Sidon representing the myth of Marsyas* (pls. vii-viii). This sarcophagus, recently excavated at Sidon, is now in the Glyptothek founded by M. Jacobsen at Ny-Carlsberg, Denmark. It dates from the early Roman Empire, and is superior to similar sarcophagi in the Louvre and in the Palazzo Pamphili Doria (Overbeck, *Atlas Kunstmyth.*, pl. xxv, Nos. 7-9). The cover exhibits a basrelief portrait of the deceased Hermogenes with figures of Apollon, Artemis, Thaleia and Terpsichore. The relief upon the sarcophagus itself is divided into three scenes representing Marsyas listening to the music of Athena, the contest of Marsyas with Apollon, and the death of Marsyas. On the moulding above the relief is the following inscription: ΕΡΜΟΓΕΝΗ ΧΡΗC(T)Ε ΚΑΙΑΛΥΠΕ ΧΑΙΡΕ ΖΗCΑC ΕΘΗΝ—EUGÈNE MÜNTZ, *The Antipope Clement VII: Essay on the history of the Fine-Arts at Avignon at the close of the XIV century* (contin.). Documentary evidence from the secret archives of the Vatican concerning artists employed upon the palace and bridge of Avignon, the châteaux Neuf du Pape, Roquemaure and Beaucaire, the monastery and college of Saint-Martial, the churches Notre-Dame-des-Donis, Saint Agricol and Les Célestins, as well as the metal-workers and embroiderers employed by Clement VII from 1378-1394.—FRANTZ CUMONT, *The Eternal Gods in Latin Inscriptions*. The epithet *deus aeternus*, applied in Latin inscriptions only to the solar divinities, Jupiter, Sol, Apollo, and Caelus, coincides historically and geographically with the introduction of the Syrian cult, and hence may be referred for its origin to the Syrian solar divinity, Baal. The feminine form may in like manner be referred to Astarte.—H. D'ARBOIS DE JUBAINVILLE, *The war-chariot of the Kelts in some historic texts*. The Romans found the war-chariot used by the Gauls at the battles of Sentinum (295 B. C.), Telamon (225 B. C.), and Clastidium (222 B. C.). It was in use when Poseidonios made his voyage to southern Gaul (100 B. C.), but seems to have disappeared before the time of Julius Caesar. It was in use in Great Britain 54 B. C.-84 A. D., and much later in Ireland.—JACQUES GUILLEMAND, *Gallic inscriptions. A new attempt at interpretation* (contin.). This paper considers the inscriptions upon two

vases from Este, now in the museum of Catago. The first is transcribed, TO·R·CNAVAS·SENV, and reads, "To. R. artificer at Senos." The second, T. Kraotornad(as)-s, is read, "T. turner of earthen vases at Senos."—A. DE BOISLISLE, *Contract of 1581 relating to carpenter-work in the rear court of the Château of Saint-Germain-en-Laye*. Contract with a master-carpenter of Paris to execute the doors and windows of the rear court.—PAUL MONCEAUX, *Lists of eponyms of the Thessalian league*. From classical literature, coins, and inscriptions the list of Thessalian rulers may be largely recovered for a period extending from the VII century B. C. to the third century of our era. The subject is to be treated in four chapters. I. *The ancient Thessalian league*. II. *The Thessalian league under Macedonian rule*. III. *The new Thessalian league*. IV. *The Thessalian league under the Roman Emperors*. The present paper considers the constitution of the ancient league, and supplies the following list of *tagoi*: (1) Aleuas the Red, of Larissa (VIII or VII cent.); (2) Skopas, son of Kreon, of Krannon (mid. of VI cent.); (3) Antiochos, son of Echekratides, of Pharsalos (mid. of VI cent.); (4) Aleuas II, son of Simon, of Larissa (end of VI cent.); (5) Kineas (511–510); (6) Thorax, son of Aleuas (480–479); (7) Echekratides, son of Antiochos, of Pharsalos (abt. 480–460); (8) Orestes, son of Echekratides, of Pharsalos (bef. 453); (9) Lykophron of Pheres (abt. 404); (10) Jason of Pheres (374–370); (11) Polydoros of Pheres (370); (12) Polyphron of Pheres (370–369); (13) Alexandros of Pheres (369–364); (14) Agelaos (364–360); (15) Alexandros of Pheres (360–359); (16) Tisiphonios of Pheres (359–353); (17) Lykophron II of Pheres (353–352).—L. DE LAUNAY, *Geological history of Lesbos and Thasos* (pls. ix, x). A description of the geological condition and history of these islands, especially concerning the stone and mineral deposits which interest the archaeologist.—SALOMON REINACH, *List of Roman Oculists mentioned on seals*. The list is made out from seals, originals and casts, in the museum at Saint-Germain. References are also given to publications, to the provenience of the seals and the museums where they are found.—MISCELLANIES. *Monthly Bulletin of the Academy of Inscriptions*.—*National Society of Antiquaries of France*.—*Archæological News and Correspondence*.—BIBLIOGRAPHY. Notices of E. BABELON, *Le Cabinet des antiques à la Bibliothèque nationale*, and of PIERRE VIDAL, *Elne historique et archéologique*.—SUPPLEMENT. CAGNAT, *Revue des Publications Épigraphiques relatives à l'antiquité romaine*.

May-June.—MAX COLLIGNON, *Marble head found at Tralleis* (Museum at Constantinople) (pl. xiv). This recent acquisition of the Museum at Constantinople M. C. recognizes as a head of a statue of Dionysos, in general character resembling the Bacchus of Versailles in the Louvre and the Dionysos in the Glyptothek at Munich. He places it in the III–II cent. B. C.—DELOCHE, *Studies on some seals and rings of the Merovingian period*

(contin.). I. Ring having as a bezil a gold third of a sou: unique. II. Seal-ring with the invocation in *Dei nomine, amen*. III. Ring with equal-armed cross on the bezil. From a Merovingian tomb at Aiguisy. LIV. Another ring with equal-armed cross. LIV. Gold ring with undeciphered inscription.—R. DE LA BLANCHÈRE, *Terracotta figured tiles discovered in Africa* (pls. XI, XII, XIII). These tiles, few analogous specimens of which have been found in Europe, were discovered in Tunisia. They exhibit in relief various forms of geometrical, floral, animal and human decoration, which sometimes show distinctly Christian significance. They were probably used in the covering of the sarcophagus-tombs.—ABEL MAÎTRE, *Gallie cemetery of Saint-Maur-les-Fossés*. The 52 tombs opened by M. Macé at Saint-Maur-les-Fossés exhibit a race corresponding closely to Caesar's *Belgi*, as is shown by a figured comparison of the arms from the warriors' tombs with those which have been found in such abundance in the neighborhood of Châlons-sur-Marne and of Reims. Other similar Belgian implements from beyond the ancient Belgium are figured, found at Asnières (Seine-et-Oise) and at Marzabotto near Bologna, Italy.—CH. GONTZWILLER, *The Venus of Mandeure* (pl. XVI). This marble statuette found in the excavations at Mandeure near Montbéliard (Doubs) in 1781, published by Duvernoy in the *Revue d'Alsace* of 1880, is an interesting replica of the Aphrodite of Knidos, showing variations from the larger replicas in the inclination of the head toward the left, the arrangement of the hair, the position of the left hand and the relief-sculpture upon the vase which supports the drapery.—BARON DE BAYE, *The Gothic jewelry of Kertch*. Various forms of Gothic jewels found in the Crimea and Caucasus are shown to have persisted to the present day.—MISCELLANIES. *Chronique d'Orient*.—*Monthly Bulletin of the Academy of Inscriptions*.—*Proceedings of the National Society of Antiquaries of France*.—*Archæological News and Correspondence*.—BIBLIOGRAPHY. Notices of E. CARTAILHAC, *Âges préhistoriques de l'Espagne et du Portugal*, of EUGÈNE MÜNTZ, *Les collections des Médicis au XV^e siècle*, and of L. THUASNE, *Gentile Bellini et Sultan Mohammed II*.—SUPPLEMENT. CAGNAT, *Revue des Publications Épigraphiques relatives à l'antiquité romaine*.

ALLAN MARQUAND.

July-Aug.—C. MAUSS, *Note on the method employed to trace the plan of the Mosque of Omar and of the rotunda of the Holy Sepulchre at Jerusalem* (pp. 1-31; pls. XVII-XIX). It is suggested that the destruction of the Holy Sepulchre in 1010 by Hakem did not touch the lower story: consequently the vandalism of 1808 attacked the original structure of the VII cent. This article is accompanied by many early illustrations, taken largely from Bern. Amico's well-known book. The writer applies Viollet-le-Duc's method to the Holy Sepulchre, and finds that the plan of the rotunda results from the intersection of two equilateral triangles whose apexes determine the exterior

circle of the gallery, and their intersections the inner circle of the rotunda. On the other hand, the writer finds that the Byzantine architects employed the following method in tracing the plan of the mosque of Omar: (1) it results from two squares inscribed within the exterior circle of the rotunda, and whose sides, prolonged, determine by their intersections the regular octagon which limits the first aisle; (2) the sides of the first polygon, lengthened, determines two other squares circumscribed by a circle. The octagon inscribed within this circle, parallel to the first, limits the second aisle. Extending his measurements, the writer seeks to show that the measurements and proportions of the uprights were determined, in these and in other ancient buildings, by the dimensions of the ground-plan, and could be predicated if we could discover the rules employed.—L. DE VAUX, *Memoir on the excavations undertaken by the Dominican Fathers at St. Stephen in Jerusalem*. In 1881, a Greek shoemaker, having purchased land N. of the grotto of Jeremiah, discovered some ruins which were attributed to the basilica of St. Stephen built by the Empress Eudoxia. The entire pavement of the church was found, and its walls to a height of about one meter. All around were large cisterns and ruins of a convent, fragments of columns and portions of a fine mosaic: also a beautiful stone *retable*, with paintings of the 12 Apostles (destroyed). This and other land was bought by the Dominicans in 1882 and 1883. In 1885, on the same property a hypogeum was discovered (JOURNAL, II, 476-7), mistakenly called the tomb of Helen of Adiabene. The hypogeum consists of a small atrium, followed by a large atrium out of which open, on the sides and at the end, six sepulchral chambers, each containing three raised funerary benches, one each side and one at the head. There are also the ruins of a chapel built by the Crusaders.—H. d'ARBOIS DE JURAINVILLE, *The source of the Danube in Herodotos*. In these notes on the earliest history of the Kelts, the writer studies the two phrases of Herodotos concerning them in his XXXIII chapter. The origin is sought of his error in making the Istros = Danube rise in the Pyrenees. Herodotos—in rejecting the evidence regarding the Ἰῶς περίοδος, in which were the other sea (ἡ ἑτέρα θάλασσα), the Kassiterides islands (Great Britain), the Rhipaian mountains, the river Istros, and the Hyperboreans—set geography back several centuries, and rejected information (coming doubtless through the Phoenicians) known to Aristens in the VI cent., and to Pindaros, Aischylos, Sophokles and Damastes in the V cent. By suppressing the Rhipaian mountains, Herodotos was obliged to place the sources of the Istros in the Pyrenees. In these earliest documents, the Kelts were designated by the term Hyperboreans.—A. AMIAUD, *Sirpûrla, according to the inscriptions of the De Sarzec collection*. This is an attempt to utilize the inscriptions for information regarding the geography, politics, history, and religion of this part of Babylonia. What city is the modern Telloh? It is Sirpûrla,

a great centre of population of which the places named Girsû-ki, Ūrû-azagga, Ninâ-ki and Gisgalla-ki were only divisions or quarters, though, according to Hommel, Ninâ-ki is Nineveh, and Girsû-ki perhaps Erech. The writer brings forward arguments to prove these names to be not of separate cities but of divisions of Sirpûrâ. There are now known twelve or thirteen rulers of Sirpûrâ. The earliest are the kings, (1) Igi-ginna, (2) Ūr-nina, (3) A-kûr-gal, his son, (4) Ūrû-kagina: then come the *patêsi* or high-priests, (1) Entena, (2) En-anna-tûmma, (3) Ūr-baû, (4) Gûdea, (5) Ūr-Nin-girsû, his son, (6) Nam-maghâni, (7) Lûkani. According to the writer, when Gûdea speaks of commercial relations with Nirûk (island of Tilmun), Gûbi (Koptos?), Magan, Meluhha (prob. Midian and Sinaitic peninsula)—by Gûbi we are to understand Egypt, which places Gûdea between the VI and XI Egyptian dynasties. Then follows a very interesting mythologic study on the group of divinities mentioned in the Telloh inscriptions, divided into three series: (1) the four great original gods, as in the Babylonian and Assyrian pantheons; (2) their sons and daughters; (3) their grandchildren. Usually, several divinities were worshipped on account of their relation to one patron deity.—A. MAÎTRE, *Note on the origin of certain forms of the bronze sword*. This is to show that these forms originated in an imitation of the nasal appendage of the *squalo-scia* fish.—E. LE BLANT, *Some archæological notes on feminine head-dress*. These notes show how ancient was the habit of tinging the hair.—F. CUMONT, *The worship of Mithras at Edessa*. This is an attempt to illustrate one of the obscure phases of the worship of Mithras.

Sept.-Oct.—H. D'ARBOIS DE JURAINVILLE, *On the use of jewels and silverware as money values in Ireland before the introduction of coinage*. In the history of contracts of sale among certain nations three periods may be distinguished: in the first, the medium consists mainly of live stock; in the second, of a certain weight of a precious metal; in the third, of a legal coinage. Irish literature contains some documents referring to the first two stages. A *seil* was the mean value of a head of horned cattle; a cow was slightly more valuable; a female slave (*cumal*) was worth three cows; and a man was worth seven female slaves. These values came to have a certain weight value in metal (*Book of Armagh*, VII-VIII cent.?). Metal objects of a certain weight (like neck-rings, wheels or bracelets) were made for purposes of trade, not to be worn (*cf.* Celtic bracelet of massive gold in the museum of St.-Germain).—FR. CUMONT, *The Taurobolium and the worship of Anahita*. The *taurobolium*, or sacrifice of the bull, is usually attributed to the worship of Kybele. The writer affirms, however, that it did not originally form a part of the worship of Kybele, but was first imported to the West in the second century of our era, at the same time with other Oriental worships, in connection with the *Venus Caelestis* or Anahita,

so often identified with the Mother of the gods.—A. LEBÈGUE, *Study on some Latin inscriptions found in the Narbonnaise*. The writer studies five inscriptions already published by himself in the *Inscriptions de Narbonne* and by Hirschfeld in vol. XII of the *C. I. L.*, and about which the two writers differ in opinion.—R. MOWAT, *The atelier of the sculptor Myrismus*. The base of a statue of Venus recently found at Chercbell bears the inscription EX OFICINA MVRISI. The writer completes it so as to form the word Myrismus, which is very common in Latin inscriptions. This artist was doubtless of Greek origin and probably from Southern Italy, which furnished so many sculptors to the West, to Africa, Spain, and Gaul.—R. DE LA BLANCHÈRE, *The inscriptions of the Djebel Toumiat*. These Latin inscriptions, roughly cut at random in the surface of a rock in Southern Tunisia, are here published more exactly than they had been by Tissot (*Afrique Romaine*, vol. II, p. 684) or by Wilmanns (*C. I. L.*, VIII, 86, 91).—A.—L. DELATRE, *Excavations of a Roman Cemetery at Carthage in 1888*. A summary of this paper has already been given in the NEWS under the heading Carthage, on pp. 473-4.—M. DELOCHE, *Studies on some seals and rings of the Merovingian period* (contin.). LV. A seal-ring found in 1850 in the Frankish cemetery of Haulchin (Hainaut), and placed in the Royal Museum at Brussels. It bears an inscription which probably is to be read +WABLEGYSVS S(ignavi) [or S(ubscripti)]. LVI. A bronze ring found in a Frankish cemetery in Namur (Belgium), on the finger of the body of a warrior, with some letters which form the name *Bolo* or *Bobolo*, which is met with in documents of the period. LVII. A bronze seal-ring, found in the same cemetery, whose inscription the writer proposes to read +AINRISVS SI(gnavi). LVIII. A bronze ring, found at Oberolm (Rhenish Hesse), on which is rudely engraved a horse. LIX. A seal, of Frankish origin, belonging to the museum of Bonn, with a monogram to be read +SI(gnum) EVSEBIE+. LX. A bronze ring, found at Rudesheim, now at Mainz, bearing an equilateral cross.—JACQUES GUILLEMAND, *Gallie Inscriptions: New attempt at interpretation* (contin.). VI. This paper commences with the study of three series of Gallic medals belonging to North Etruria, respectively of the types designated by the inscriptions on them as (1) *Senas*, (2) *Ifukove*, (3) *Kesios*. The first belong to the Umbrian city of Senos=Sinigaglia, the second the writer reads *Iulicovei*=*Sapientiosi*, the third he reads *Kusios* and attributes to the Gallic city of Cutiae=Cozzo (Piedmont). Then follows an examination (VIII) of the helmet of Marburg, now in the museum at Vienna; whose two inscriptions, engraved one with lines and the other with dots, have been considered to be Etruscan, but are here claimed to be Gallic and read respectively *Siracu fui*si* Parmeisui* ("to an unfortunate, the faithful inhabitants of Parma") and *Tuth ni thanuati* ("the soul dies not"). The paper concludes by explaining the two Gallic words on a stele found in 1852 at

Monza and bearing a Latin inscription respecting a Mithraic offering, to which are added, in Gallic, *iaerū itiu*: "the faithful associate themselves" (i. e., to this homage).—P. MONCEAUX, *Eponymic Fasti of the Thessalian League, Tagoi and Strategoi* (contin.). The heading is: "Chapter II. The Thessalian league under the Macedonian domination. The *strategoi* of the tetrarchies and the protectorate of Philip II (352–44); the Kings of Macedon, *strategoi* of Thessaly (344–197)." The intervention of Philip, at the instigation of the Aleuadaï of Larissa, made Thessaly a dependency of Macedon for a century and a half, though it apparently preserved its autonomy. It is asserted that Philip established the tetrarchs by which he divided the country in 352, and that in 344, contrary to the usual opinion, unity was reestablished by him, the Kings of Macedon being thenceforth *strategoi*. Several of the tetrarchs who flourished between 352 and 344 are known from texts, inscriptions, or coins. The writer names Eudikos and Simos of Larissa, Thrasydaïos and Leon of Matropolis. In regard to the political condition of Thessaly after 344, there is among ancient writers an apparent contradiction. On the one hand, there are facts to show Thessaly's complete subserviency to the Macedonian Kings, and, on the other, are acts that could only emanate from an autonomous people. The writer reconciles these two by supposing the Kings of Macedon to be also *strategoi* of Thessaly.—C. PALLU DE LESSERT, *The formula, Translata de sordentibus locis, found on the monuments of Cherehell*. On some of the monuments found at Cherehell is the peculiar formula, in very late characters: *Translata de sordentibus locis*. These *sordentia loca* the writer takes to be the pagan temples, and he shows that works of art, where they had more than a purely religious interest, were preserved, and, in this case, the statues here collected formed a sort of museum, under the auspices of the governor of Mauretania Caesariensis.

A. L. F., JR.

REVUE DES ÉTUDES GRECQUES, T. I. No. 3. July-Sept., 1888.
—AMÉDÉE HAUVETTE, *Herodotos and the Ionians*. The history of Ionia from the Lydian conquest to the close of the Medic wars rests entirely on the authority of a single historian, Herodotos. In view of this fact, it is the duty of criticism to subject this testimony to the minutest scrutiny. The writer judges, that Herodotos was somewhat influenced by opinions unfavorable to the Ionians, then current in Greece and especially at Athens and Delphoi; that he neglected to make use of Ionian traditions regarding the events he narrated; and that in general, though an Ionian himself, he shows little sympathy for them.—A. H. SAYCE, *The ancient quarries of Ptolemaïs*. On the east bank of the Nile, between Menschiyeh (anc. Ptolemaïs) and Girgeh, are the ruins of an ancient city and of a fortress and a street of Greek tombs, while two miles to the south are some vast quarries.

Here was the Greek capital of Upper Egypt. The south and north quarries contain respectively one and two Greek inscriptions and some Latin graffiti, all of which are here published.—EUGÈNE MÜNTZ, *The Column of Theodosios at Constantinople*. This column is now known only from the drawings alleged to be by Gentile Bellini. One collection, now in the École des Beaux-Arts is, however, not earlier than the xvii cent.; another, in the Louvre, is now attributed to G. B. Franco, an artist of the xvi cent. The writer explains the origin of the attribution to Gentile Bellini of drawings of this column, by showing how a large roll, 52 ft. long, representing all its reliefs was attributed to him by French writers of the end of the xvii and the beginning of the xviii cent.—TH. REINACH, *Forgotten cities*. These are Licinia, the earliest Roman foundation in Asia, and Lampsamé, which is here identified with Samosata.

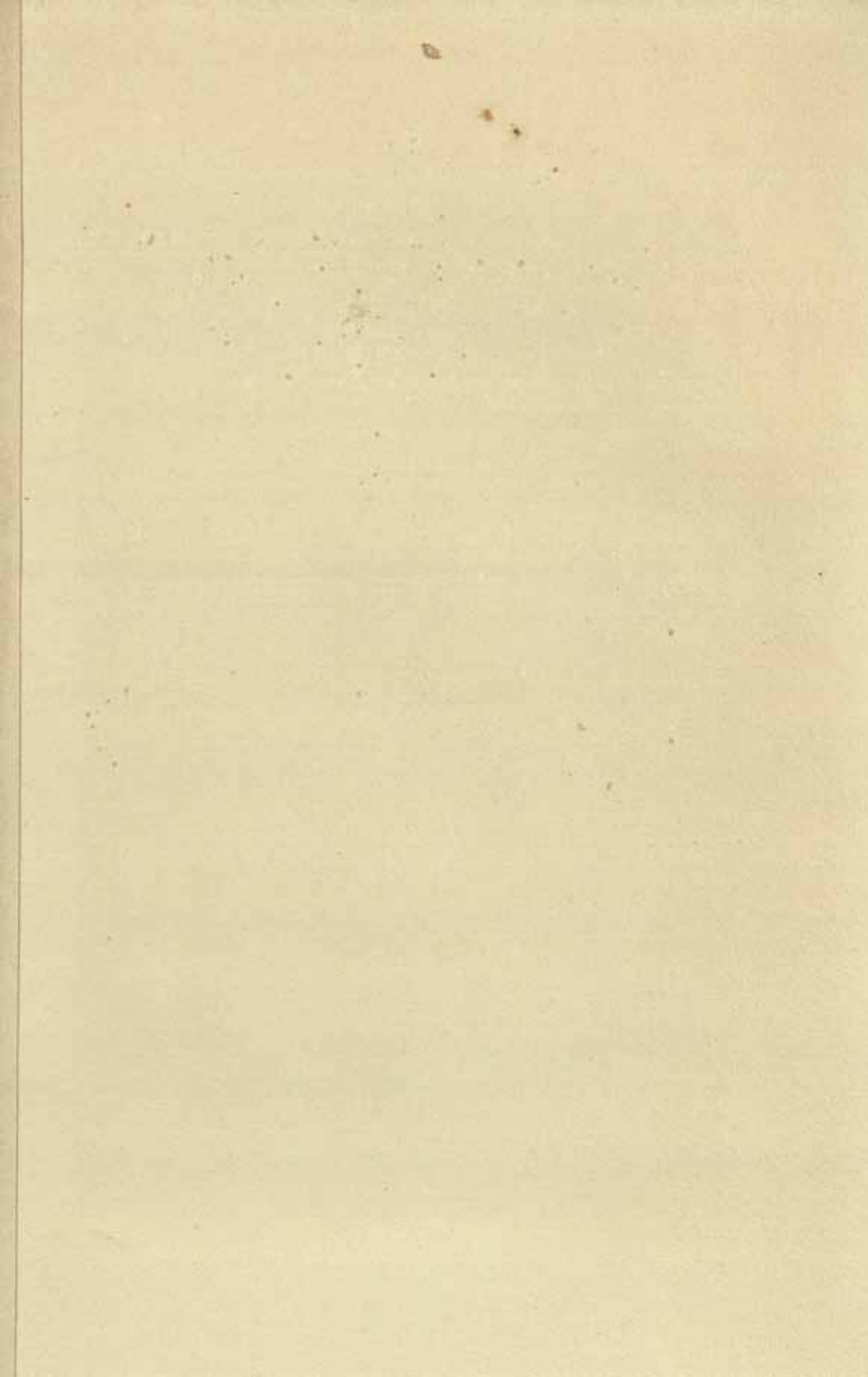
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RIVISTA ITALIANA DI NUMISMATICA.¹ Anno I. Fasc. I. 1888. [The various Numismatic Reviews that have successively been born and died within this century in Italy have owed their short life mainly to the fact that each depended on the personal effort of one man and lacked the necessary element of combination. The present review aspires to unite the efforts of all the numismatists of Italy, and appears shortly after the decease of the only other representatives of the science in that country, the *Gazzetta Numismatica* and the *Bullettino di Numismatica e Sfragistica*.]—FRANCESCO and ERCOLE GNECCHI, *Some inedited and unknown coins of the mint of Scio*. A description is given of some of a lot of silver coins found, in March 1887 not far from Scio, in an earthen urn. The new coins are of quite a new and unusual type, leading some to suspect their genuineness. The following is an approximate list: Rhodes, 13; Carpentras, 3; Napoli, 80; Venezia, 75; all these belong between 1309 and 1346. Scio: 1 of Paleologo and Benedetto II Zaccaria (1310–13), 2 of Martino Zaccaria alone (1315–29), 6 of Galeazzo Maria Sforza (1466–76), 9 Maona coins, anonymous (xv cent.), 5 of Louis XII of France (1500–12). The novelties belong to the mint of Scio, which was under the Genoese from 1301 to 1566. The Genoese admiral Benedetto I Zaccaria conquered it in 1301, and his family ruled there until 1329, when the island was occupied by the Greeks: a new invasion of an association of Genoese ship-owners took place in 1347, and this association under the name of Maona obtained the right of coinage, which it used intermittently until 1566.—S. AMBROSOLI, *The find at Lurate Abbate*. In August, 1887, was found at Lurate Abbate, province of Como, a lot of silver coins with a few gold ones. There were 1273 Mediæval coins,

¹*Rivista Italiana di Numismatica*, diretta dal Dr. Solone Ambrosoli, conservatore del R. Gabinetto Numismatico di Brera e da un Consiglio di Redazione. Milano, Lod. Fel. Cogliati, Tipografo-Editore, Via Pantano No. 26. Price \$4.40.

mostly Italian, in satisfactory preservation, none later than the middle of the XIV cent.: the probable date of the deposit is about 1320. A great variety of mints are represented, Venezia taking the lead with over 500 coins, principally *matapane*. Then came coins of Meran, Ivrea Acqui, Trento, France (Philippe-le-Bel, Charles II d'Anjou of Provence), Milano and a number of North Italian cities, Tuscany, etc. But the greatest interest lies in the imitated coins—imitations of the *grosso Tirolino*, of the *matapane*, and of the *grosso tornese*. These are carefully described and discussed. The pearl of the collection is a superb *grosso tornese* of Chivasso, coined by Theodore I of Montferrat, son of the Emperor Andronikos II Palaiologos. It is unique.—UMBERTO ROSSI, *The Renaissance medallists at the Court of Mantova*. 1. *Ermes Flavio de Bonis*. The name of this artist was first noticed on a medal by Armand (*Les médailleurs Italiens des XV^e et XVI^e siècles*, I, 120). He was born at Padova about 1460, and entered the service of Cardinal Francesco Gonzaga and of his brother Lodovico bishop of Mantova. He acted as architect of the palace at Ostiano, of a chapel at S. Pietro in Mantova, of another palace in Castelgoffredo and of the superb Gonzaga palace in Gazzuolo. Ermes made for the Bishop a large collection of casts of works of art, especially antiques.—Conte GIO. MULAZZANI, *Economic Studies on the coins of Milano*. Posthumous publication of part of a preface to a monograph on the Mint of Milano, written in 1838, and divided into sections: (1) value of the gold; (2) value of the silver; (3) *billon* and copper coins; (4) value of the coins; (5) absolute and comparative value of ancient as compared with modern coins.—EMILIO MOTTA, *The Milanese coiners of 1479*. A list is given of the *operarii* and *monetarii* of the Mint of Milano in 1479.

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Helios Euprosine

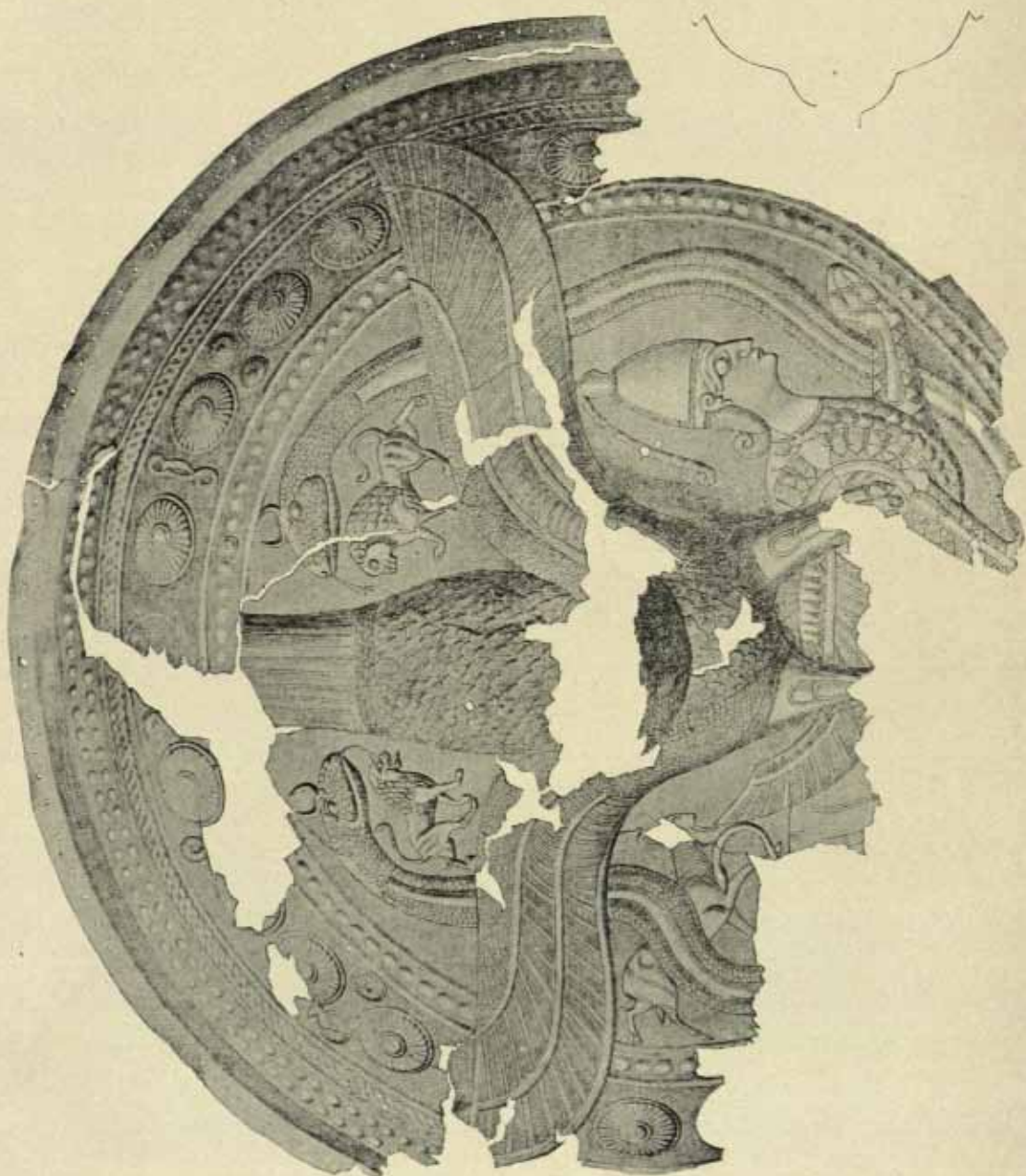
TERRACOTTA STATUETTES FROM MYRINA

Museum at Constantinople

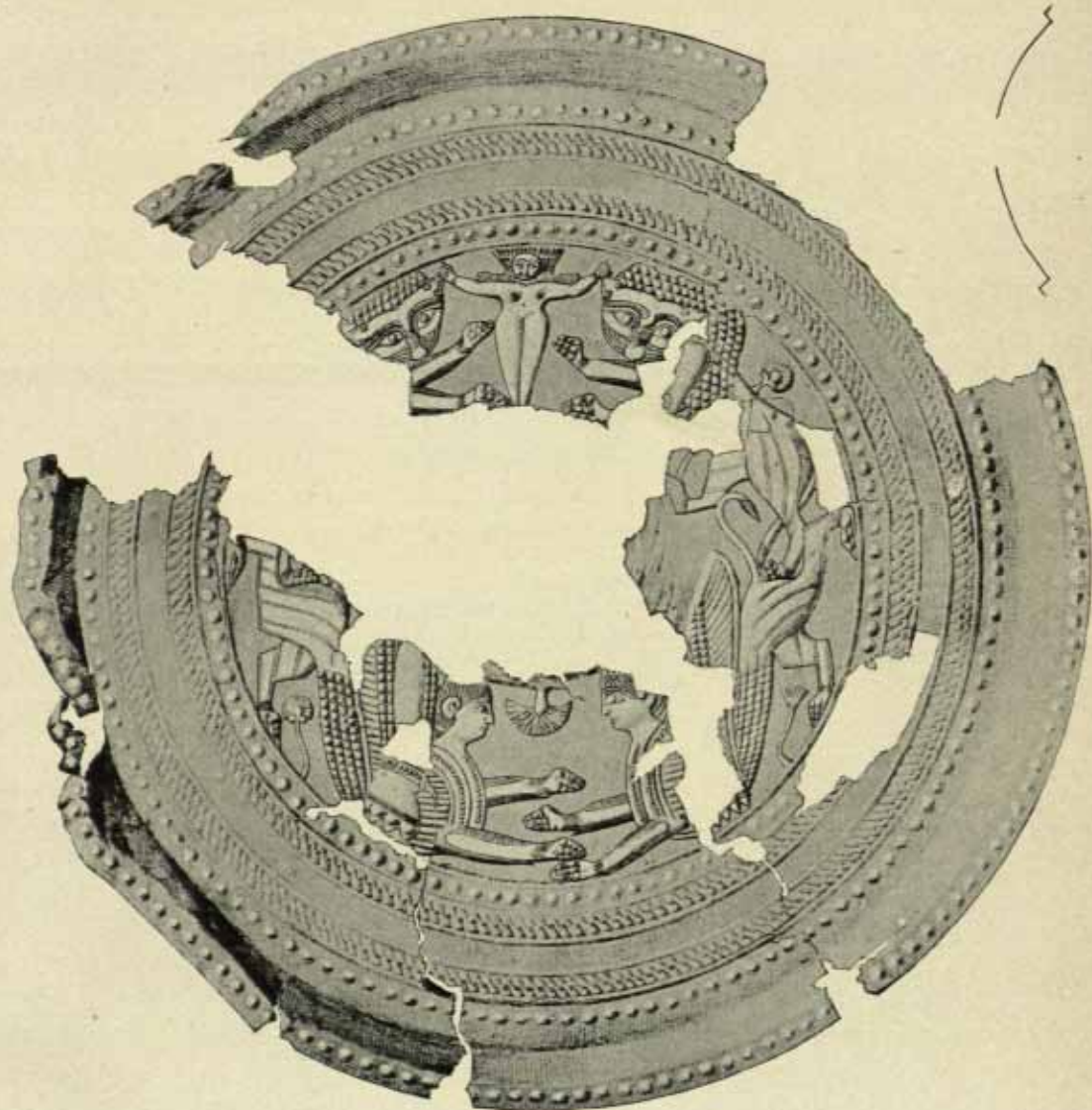




EARLY BRONZES DISCOVERED IN THE CAVE OF ZEUS ON MOUNT IDA IN KRETE:
SHIELD OF MERODACH—MELKART.

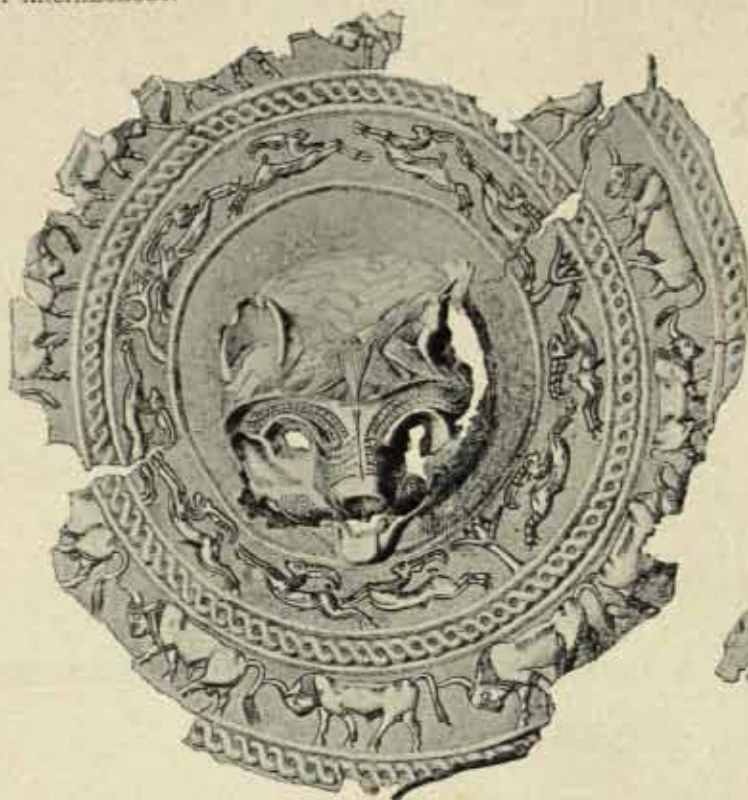


EARLY BRONZES DISCOVERED IN THE CAVE OF ZEUS ON MOUNT IDA IN KRETE:
SHIELD OF HORUS.

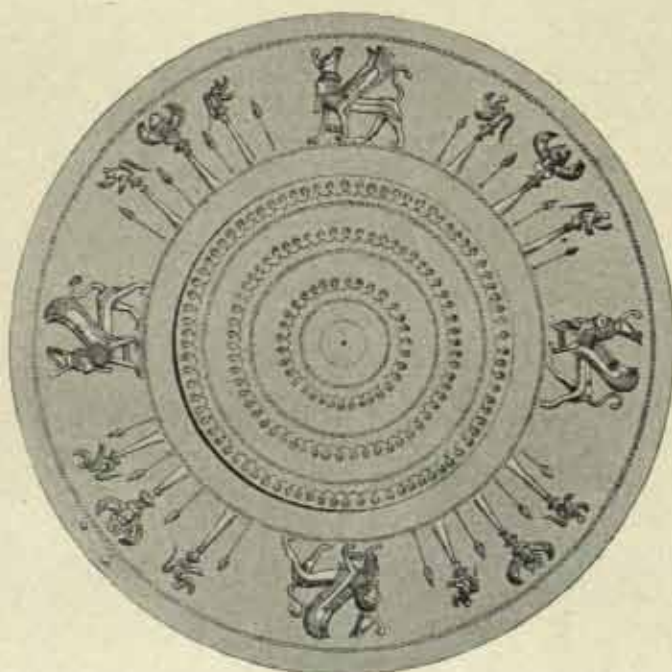


EARLY BRONZES DISCOVERED IN THE CAVE OF ZEUS ON MOUNT IDA IN KRETE:

SHIELD OF ASHTAROTH=ASTARTE.

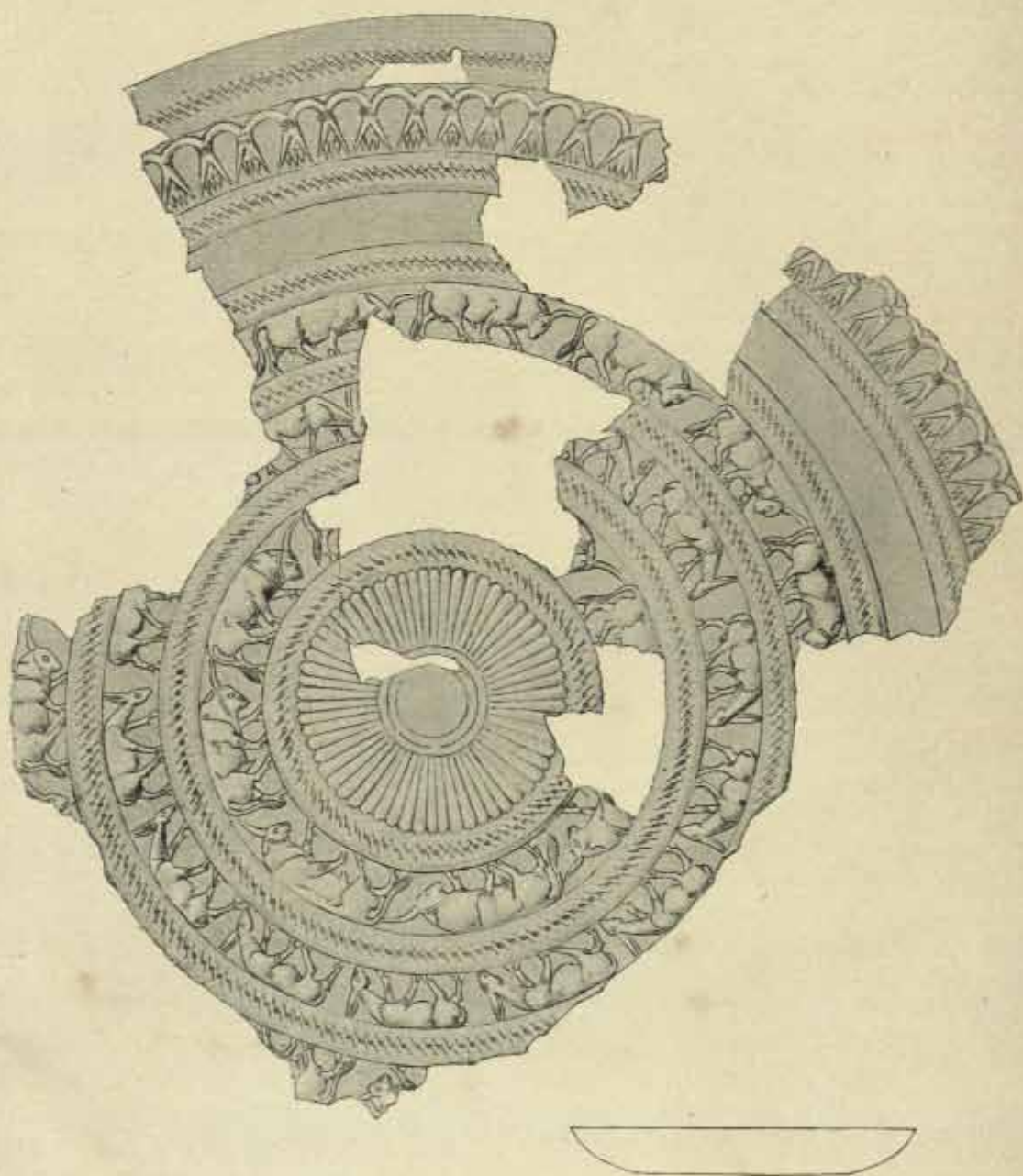


SHIELD OF THE GOATS.

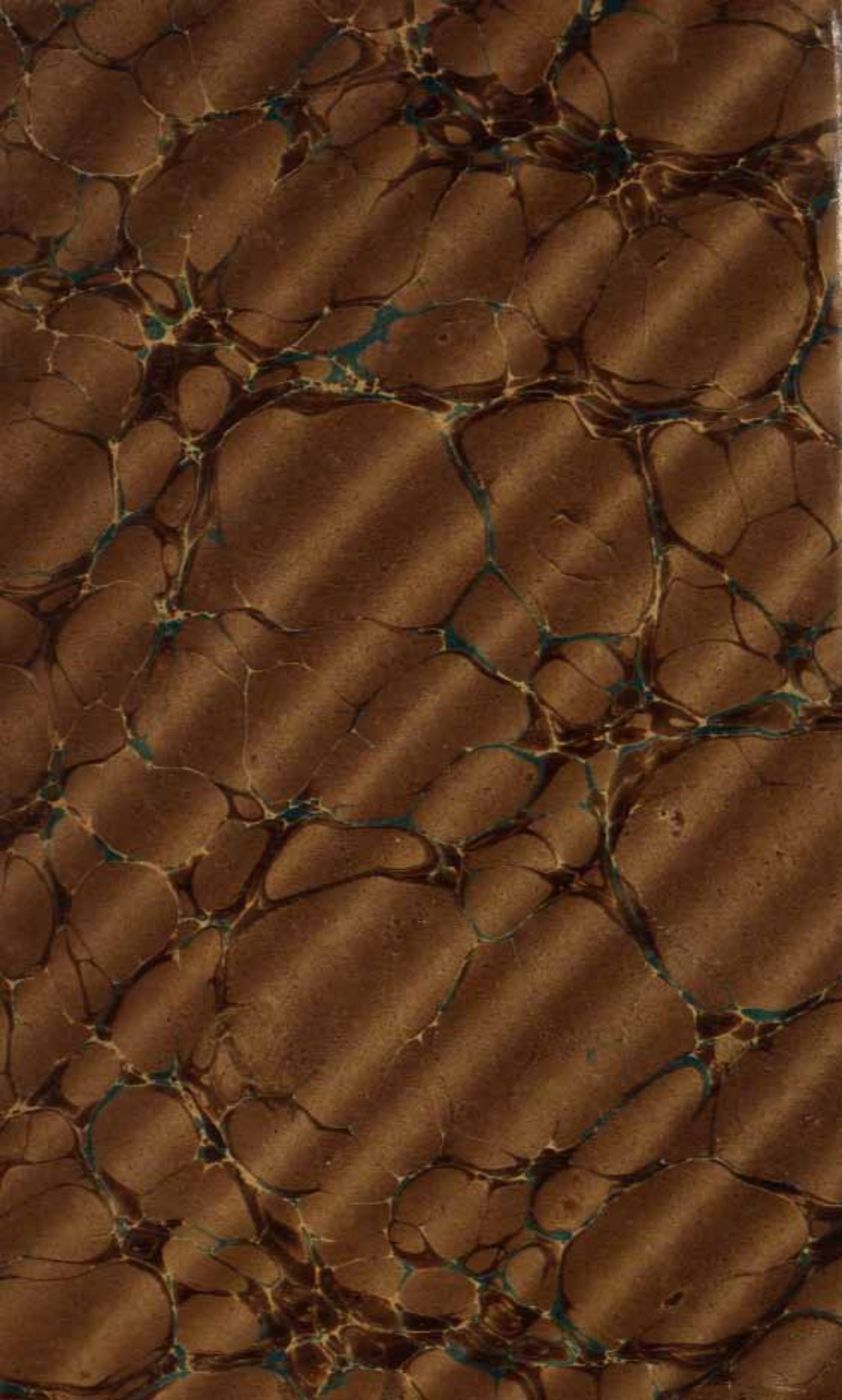


EGYPTO-PHENICIAN PATERA.

EARLY BRONZES DISCOVERED IN THE CAVE OF ZEUS ON MOUNT IDA IN KRETE



EARLY BRONZES DISCOVERED IN THE CAVE OF ZEUS ON MOUNT IDA IN KRETE.
PATERA WITH ZONES OF ANIMALS.



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